AC 8
.J882

Very truly Yours
William E Burden

WAY-MARKS

OF

TWO ETERNITIES:

A LIBRARY OF SCIENCE,

BEING A HISTORY OF THE CREATION, ORIGIN, AND EVOLUTIONS OF PLANETS AND THEIR INHABITANTS; CREATION AND HISTORY OF THE EARTH; ORIGIN OF LIFE AND OF THE SPECIES; DESCENT OF MAN; PRE-ADAMIC RACES; THE WORLD BEFORE THE DELUGE.

FUTURE of MAN, of the EARTH, and of the SUN.

LIFE AND DEATH,

THE HERE AND THE HEREAFTER.

Facts from Nature, Novel as a Fairy Tale, of Stupendous Importance to the Human Race.

BASED ON ESTABLISHED DATA

Of Natural Philosophy, Astronomy, Geology, Biology, Anthropology, Archæology, Zoölogy, Embryology, Metamorphology, Geometry, Chemistry, Botany, Physiognomy, Surgery, Sociology, Psychology, Traditions, and Religions of the World.

By WILLIAM E. JURDEN, A. M., M. D.

COPY OF CONGRESS
COPYRIGHT
JUN 20 1891
18367

"Produce your cause; bring forth your strong reasons; show us what shall happen; show the former things, what they be, that we may consider them, show the things that are to come hereafter. Magnify the law, and make it honorable."—Isaiah.

FINELY ILLUSTRATED.

PUBLISHED BY

DR. WM. E. JURDEN,

Eau Claire, Wisconsin.

(Prospectus)

AC3
J882

Entered according to Act of Congress, in the year 1890, by
WILLIAM E. JURDEN,
In the Office of the Librarian of Congress at Washington.

ALL RIGHTS RESERVED.

PREFACE.

This book is an attempt to explain the origin of life and of man on our globe, to give a history of the world and of the universe from its beginning, and to lift the vail which hides the future. It will attempt to prove the following new and original propositions : —

1. That worlds have periods of growth, development, and decay. In a more magnificent sense, their beginnings and histories correspond to the beginnings and developments of individual human life : Inception — Embryos — Birth — Childhood — Manhood — Old Age, and Death.

2. To know the series of changes in the life of a human being, is to know the natural history of all human beings ; to know the evolutions in the life of one planet, is to know the natural history of all planets. And in like manner as we study human life in all stages of its development, so, also, we look out into the heavens, and behold worlds in all stages of their natural existence.

3. Comets are planets in embryo ; like the embryos of all life, they do not all reach maturity, being often precipitated upon planets, or drawn into the vortex of suns. They wander in space, carried by the ether currents imparted by the rotation of great suns, until their consuming fires have condensed for them a nucleus, rock-encrusted, and a surrounding atmospheric envelope, upon which a sun's rays can act, imparting axial and orbital

motion, when they appear in a changed aspect, new-born babes among the planets.

4. The earth was once a comet,—a fiery, phosphorescent, burning chaos of matter, wandering in space. The comet earth, like the inception of all comets, was drawn by the sun out of the "formless void," "dark waters," distant nebula of space. The inception of our world was the flame imparted by the rays of a maternal sun, as when carbon gas is touched with fire. "*God said let there be light, and there was light.*"

5. The first day, or period, in the history of the earth as a planet, is now being re-enacted in the planet Neptune, the most remote planet in the solar system, babe of the sun, youngest sister of the earth. Neptune still possesses many of the characteristics of a comet. Stars can be seen through her in all parts save the central nucleus. Infinite ages ago, when the earth was young, in the first day of her history, she occupied the place of Neptune, and differed not essentially from her; the central core of fire had become encrusted with red glowing rock, while a dark atmosphere of dense vapors, ten thousand miles in depth, enshrouded the world in darkness; thus "*God divided the light from the darkness.*"

6. The second day or period in the world's history is now being repeated by the planet Uranus. Oxygen has found its equivalent in hydrogen, creating watery vapors, and from the depths of black sky is being poured out waters in one universal shower, while an intervening purer atmosphere divides "*the waters which are under the firmament from the waters which are above the firmament.*"

7. The third day or geologic age in the history of the world, is now represented by the planet Saturn. The accelerating rapidity of axial rotation has caught up the

superabundant cloud-banks of cosmic matter forming gigantic external rings. Beneath the mighty depths of dark atmosphere, mountains of recently upheaved rock lift their bosoms above the waters. In this manner God said, "*Let the waters under the heavens be gathered together unto one place, and let the dry land appear; and it was so.*"

8. The fourth day in the world's history, as at the close of each preceding day, the earth assumed a place nearer the sun, and occupied the present position of the planet Jupiter. Under the rays of a closer and brighter sun, vegetation, which began in low forms on the third day, now covered the landscape, as if by magic, feeding upon and storing away into immense beds of coal the dark envelope of carbon clouds, letting in for the first time upon the surface of the earth the light of sun, moon, and stars, "*for signs and for seasons and for days and for years.*"

9. The fifth period or day in the history of the world, our planet occupied the place of the asteroids. Stimulated by the life-giving rays of a still nearer and brighter sun, the fishes and low forms of life, which since the third day had filled the waters, now evolved higher and amphibious forms. "*The waters brought forth abundantly the moving creature,*" winged fowl appeared in the open firmament of heaven, the Age of Reptiles had come, and "*fowl multiplied on the earth.*"

10. The sixth day or epoch in the history of the earth, she occupied the place and represented a similar appearance and aspect to the planet Mars. A nearer sun shone down with a new vitalizing power, transforming all the types of former life; the human foot and hand, the human form and a dim miniature of the human brain,

made their advent in the world; monkeys, apes, orangs, chimpanzees, and numerous human caricatures made their appearance, crossing, propagating, and rising higher; while out from the progressing and evolving cosmos of material, "*God said let us make man in our image.*"

11. The seventh day began with the Noachian Deluge, when the earth changed its polar axis, and assumed its present position in the heavens, a position still nearer the sun, bringing with it the calm stability of human history, and a period of quiescence from the war and turmoil of elements, by the activities of which the world had been evolved. "*And on the seventh day God rested from his labors.*"

12. The eighth day or era in the history of the world, yet to come, the earth will occupy the position and place of the planet Venus. Then will come a new unfolding. Man will become a being grander and better, the race will climb up to a homogeneous unity, all men will be of one heart and one mind, the millennium will have come, mankind will have beaten their "*swords into plowshares and their spears into pruning hooks.*" In that new and more genial clime, when the earth shall have taken a position nearer the sun, "*the light of the moon shall be as the light of the sun, and the light of the sun shall be seven-fold in the day the Lord bindeth up the breach of his people, and healeth the stroke of their wound.*"

13. The ninth day and age in the history of the world, she will assume the place of the planet Mercury, near the sun, at last a laden world of death and rock, the tomb of all preceding ages, sarcophagus, shroud, pall, and bier of all the past, waiting for the resurrection promised by all the priests, "*ripe for the harvest, and red for the winepress.*"

14. Then the earth shall plunge into the seething fires of a central sun, "*the elements shall melt with fervent heat,*" "*the earth shall be broken down; it shall be clean dissolved.*" Every sleeping energy, every physical and mental force hid away in earth and rock, shall spring to life; every moral and intellectual principle, the camera plates of life and character, dust, with its engraven images of thought and love slumbering in the bosom of the world, shall be called up; the great charnel house of the earth itself shall spring again to life, "*the dead, small and great, shall stand before God.*"

15. Such has been and will be the history of the world, and such has been and will be the history of every planet, and of every embryonic comet. They all represent stages of development in the life of planets. To know the past and future of the earth is to read the past and future of all the worlds in the infinite expanse of heaven.

16. This book will prove that the earth has revolved on other polar centers, with other tropics and other regions of ice-covered arctics; that the change to her present position was sudden, overtaking the elephants of tropical Siberia in a single night, and preserving them in ice with the blast of frigid cold until this day, while glacial ages followed in the new tropics, by the melting of the ice of former poles. Such is the history of Utah and the ice origin of her salt seas.

17. Science proves, and the Bible teaches, that man has inhabited this globe for a period of no less than five hundred thousand years; that there have been four distinct human epochs, separated by mighty convulsions or chasms, which have befallen the earth and devastated its life. The last human epoch we will call the Age of Let-

ters, comprising the period of all hieroglyphics and written symbols, which embraces the Age of Iron ; prior to which time there was a distinct human Age of Bronze, back of which a distinct human Age of Stone, and still earlier, the half-human Age of Cave-dwellers.

18. This work will be an arcanum of nature in its varied departments, creating a new science out of the sciences, forming of classified facts a geometric whole. The human inception, the human embryo, antenatal influences, and the influences of society, will be embraced in their proper places. A new light will be thrown on existence itself. Human thought in its relation to divine thought, life and death, will be contemplated.

19. The book will prove man an immortal being, and in gates ajar show an inkling of a glory beyond the stars.

THE AUTHOR.

CONTENTS.

CHAPTER I.

The rock on which we build — Fundamental principles underlying all existence — Eternal attributes — Matter, Force, Causation.

Idealism and Materialism — God and the Universe — Divine thought manifest in the physical universe — Matter is eternal — Force is eternal — Change is eternal — Causation is eternal — Destiny in all things — God — Mind — Matter — Humanity.

CHAPTER II.

The perpetual creation — Dying and being born forever — Evolutions in General.

Progression and Retrogression — Changes are eternal — The brain a grave — We subsist on death — Life and forms of life — Worlds and systems of worlds appearing and disappearing forever — Longfellow, Ingersoll — Eternity.

CHAPTER III.

History of the beginning of the creation of the heavens and the earth.

Unconscious forces — Night of chaos — Matter diffused through space — Brooding consciousness — Gathering clouds of nebula — Combustion — Centers of fire — Motion — Comets — Embryonic suns — Central whirlpools of fire — An infinite number of comets and lesser worlds that have fallen into the sun ; his increasing fires — His light and heat brooding comets changing to planets —Falling at last into the sun — Our system — Other systems — All the stars.

CHAPTER IV.

Meteors — Comets — Nebula — Zodiacal light — Aurora Borealis — Food supply of forming worlds — A forest of growing worlds.

Shooting stars, meteoric showers — Cosmic matter in the planetary spaces — Origin and destiny of comets — What they are — Nucleus and tail — Their elliptic motion — Rapid changes — Biela's and Halley's comets — Encke's comet now changing to a world — Neptune born of the comet of 1770 — Other comets — Nebula in Canes Vanetaci — In Ursa Major — Herschel — Other nebula — Relation of meteors, northern lights, comets, and nebula — Spectroscopic analysis of them — The heavens compared to a forest with trees in all stages of development.

CHAPTER V.

Evolutions of the planets — Past, present, and future of Mercury, Venus, Earth, Mars, Asteroids, Jupiter, Saturn, Uranus, Neptune — Inhabitants of each evolving with the evolutions of the planets.

Mercury the oldest planet of our system — Older planets that have fallen into the sun — Neptune a recent planet — Planets taking new positions nearer the sun — The seven creative days of Genesis — Seven outer circles around the sun — Seven ellipses of the earth falling to the sun — The earth's orbit representing the seventh day of all planets — Slow condensation and continued creation of planets — Venus inhabited with beings higher than man — External remote planets not inhabited — All the planets separately considered — Other systems — The infinite ocean of stars — Boundless theaters of life.

CHAPTER VI.

The sun in his cortege of planets — His past, present, and future — Other suns.

Size and distance — Composition — Spots — Character — Light and heat — His outer elements — His external, ethereal garb embracing all the planets — We are in the arms of the sun — Our sun leaning against other suns — An infinite sea of suns.

CHAPTER VII.

THE STARS — SIZE — DISTANCE — NUMBER — COMPOSITION — CHARACTER — SPECTROSCOPIC ANALYSIS — THE MILKY WAY — OTHER MILKY WAYS.

Great changes taking place in the stars — The constellations — Cygnus — Cetus and Hydra — Single, double, and multiple stars — Evolutions, past and future — Infinitudes and eternities.

CHAPTER VIII.

HISTORY OF THE BEGINNING OF THE CREATION OF THE EARTH.

A profound of unconscious chaos — Gathering nebula clouds — Touched with light — Unconscious matter springs to conscious life — Our world a comet — Next a gaseous planet thirty thousand miles in diameter — Forming and falling of granite crystals — A central sea of boiling rock — The earth robed in a dark garment of vapors — "Roll on, Young World," a poem — The oceans and hills — Bible quotations.

CHAPTER IX.

THE GREAT KEY — SUDDEN POLAR CHANGES OF THE EARTH — ITS CRUST BROKEN LIKE A CRUMBLING SHELL — THE NOACHIAN DELUGE — CAUSE OF AXIAL AND ORBITAL MOTION — REASONS WHY PLANETS TAKE NEW POSITIONS NEARER THE SUN.

The earth has three days, an axial day of twenty-four hours, an orbital day of one year, and an elliptic day of six hundred thousand years, terminating with a sudden polar change, and a new and nearer path around the sun — These are the seven

days of Genesis — The flood — Noah's ark — The United States before the flood, an ice-covered polar region — Utah and her salt beds — South America and the old equator — Siberia once a tropical clime — Frozen elephants with evidences of human civilization — Key to geology — Key to Genesis — Key to mysteries.

CHAPTER X.

CHEMICAL BASIS OF LIFE — OUR MATERIAL CHEMISTRY IS GOD'S IMMATERIAL GEOMETRY.

The infinitely great and the infinitely small — All life the antitype of environments — Crystallization — A complex crystal or ovum of life — Organic and vital chemistry — A universe within the atom — Every atom a living force — Affinities and repulsions — Males and females — The amalgamation and crossing of atoms — Protoplasm — The base of all life — Organization constitutes life — The more complex the organization, the higher the life.

CHAPTER XI.

SPONTANEOUS LIFE — MOLD OF CORRUPTION AND MAGGOT OF DECAY — FIRST FORMS OF LIFE ON THE GLOBE.

Minute forms of life which appear in fermented liquids — Bachteria — Malaria — Infusoria — Animalcula — Ditch-water and hay infusions — Parasites — Insectivora — Huxley, Tindall, St. Paul — The air we breath composed of living, solid particles — The first life of the globe — Sequences of evolving ages, this map of — Humanity.

CHAPTER XII.

MECHANICS OF LIFE — THE EYE, EAR, HEART, AND BRAIN.

Inorganic nature compared with living functions — Mastication — Absorption — Assimilation — Electricity — Heat — Light — Hydraulics — Hydrostatics — Mechanics of the heart, brain, eye, and ear — Philosophy of muscular movements — Man a crystallization — Man a vegetation — Man a machine — The in-dwelling of God — Finite and infinite thought.

CHAPTER XIII.

INTRODUCTION TO GEOLOGY — THE EARTH A BOOK.

Mount Vesuvius — The Nile — Ripple marks in rock — Footsteps — Ruins that will be a million years hence — Ruins of the past — Bones and fossils — Skulls and skeletons — The earth a tomb — The world-book opened — Its tremendous record of the past — Its wonderful predictions of the almost infinite future.

CHAPTER XIV.

FIRST DAY OF THE WORLD'S HISTORY — AGE OF FIRE AND FALLING GRANITE — PRESENT STATE OF THE PLANET NEPTUNE.

The earth's central core of fire — Volcanoes — Earthquakes — Early condition of the earth — A glowing nebula — Showers of rock crystals — Formation of granite — Ideal observations from the planet Saturn — The blazing world robed in blankets of vapor — Dividing the light from the darkness — Liquid sea of fire — The hollow deeps of Milton's hell — Terrific turmoil in the molten flood — White hardening granite billows — A mantle of darkness against the sun — The planet Neptune.

CHAPTER XV.

SECOND DAY OF THE WORLD'S HISTORY — AGE OF FALLING OCEANS — CREATION OF GNEISS — A DESCRIPTION WHICH APPLIES TO THE PRESENT CONDITION OF THE PLANET URANUS.

Vapors — Rain-storm — The struggle of fire and water — Boiling oceans — Crumbling granite — Forming gneiss — Slate — Gold, silver, and other metals — Terrific convulsions — Earthquakes — Volcanoes — Water-spout columns on the flood — Waters above and below the firmament — Water in the arms of fire — Final triumph of water — Out-pouring flood from clouds ten thousand miles in depth — The planet Uranus.

CHAPTER XVI.

THIRD DAY OF THE EARTH'S HISTORY — AGE OF DAWNING LIFE — CREATION OF MARBLE — REIGN OF CORALS AND SHELL-FISHES — A DESCRIPTION WHICH APPLIES TO THE PRESENT ON THE PLANET SATURN.

Marble and other limestone formed from the crumbling débris of life — Earliest geological evidences of life in serpentine marble — Corals — Mollusks — Rhizopods, Ganoids, Trilobites — Great distortions and vast upheavals — Warm oceans — Dense atmosphere — No sun, moon, or stars — No beasts of prey — No singing birds — No forests of maple or pine — Axial and orbital changes — The planet Saturn.

CHAPTER XVII.

FOURTH DAY OF THE WORLD'S HISTORY — AGE OF COMING BLUE AND BLAZING SUN — ERA OF COAL — FORESTS AND REIGN OF FISHES — A DESCRIPTION WHICH APPLIES TO THE PRESENT ON THE PLANET JUPITER.

Coal forests of the fourth day — Prodigious and wonderful vegetation feeding on the carboniferous air — Immense peat-beds — Creation of coal — The clearing of the earth's cloud-belt of dark, thickened air — Unveiling of the earth's face naked to the stars — Sun and moon are seen like a fresh creation — The fishes of the carboniferous seas — It is the reign of fishes — The earth again changes her polar centers, and commences a new and nearer path around the sun — A telescope and the planet Jupiter.

CHAPTER XVIII.

FIFTH DAY OF THE WORLD'S HISTORY — AGE OF CHAOTIC ABUNDANT LIFE — REIGN OF REPTILES, OR ERA OF FOWL — NOW REPRESENTED BY THE PLANETS ASTEROIDS.

The crust of the earth broken like a shell — Distorted by stupendous causes — New evidences of polar changes — Burial of the coal measures in broken strata, and by volcanic exudations — Evi-

dences of design — Upheaval of granite mountains — Iron, petroleum — A new earth and a brighter sun — New conditions more favorable to life — Age of Reptiles — Abundant conglomerate creation — Struggles for existence — Bloody battles — The vice of nature's moldings — The earth assumes again a new axis and a new orbit — The asteroids.

CHAPTER XIX.

SIXTH DAY OF THE WORLD'S HISTORY — AGE OF CHANGING SKELETON AND COMING BRAIN — REIGN OF MAMMALS AND VARIED SPECIES — A DESCRIPTION WHICH APPLIES TO THE PRESENT ON THE PLANET MARS.

Origin of the species — Results of axial changes — Floods — Glacial epochs — A new map of the world — A new equator and a new temperate belt — The United States deep buried in arctic ice — Siberia, Alaska, and Greenland in the tropic and temperate belt — South America also in the north temperate zone — A brighter sun — Conditions favorable to a higher order of living beings — Metamorphoses of the types of life — Age of mammals, apes, monkeys, orangs, gorillas, chimpanzees, half human beasts, fur-covered savages — All nature pointing to the coming man — God said, "Let us make man" — Here in the middle of the sixth day prior to man's creation, we drop the thread of history to consider subjects already implied.

CHAPTER XX.

GEOLOGIC SUMMING UP — TIME IS LONG — GLACIAL EPOCHS — AGASSIZ, OWEN, HITCHCOCK, HUXLEY, DARWIN.

Progressive record of geology — The immense periods of time required to form the strata of the earth compared to eternity — The slow work of present seas — Observations on the sea-shore — The wear and tear of elements — The world chiseled and changed — The sculptor still at work — Creation going on forever — Facts and inductions — Evidences of arctic glaciers in Africa, in Asia, in Australia, and in South America — The history of the world is a history of great and magnificent changes.

CHAPTER XXI.

Whirlwind and tempest of fire — Fall of comets and meteoric storms — Sodom and Gomorrah.

The down-pour of elements into the sun — Comets and meteors that have deluged the earth and added their substance to its strata — The old world with its Garden of Eden separated from the new by a flaming sword — Till and meteoric dust.

CHAPTER XXII.

Biblical criticism — Antiquity of Egypt and India — The book of the dead — The Vedas — Adam the name of a race.

Methuselah was the oldest nation the world ever saw — The kingdom of Noah destroyed by flood and fire — Older Scriptures — The book of Jasher — Sacred books of Egypt and India — The sayings of the Old Testament older than has been conceived — In it is the accumulated wisdom of antiquity — Inspiration and the sayings of savages — Cain and his wife — The rib story — The tower of Babel but a tradition of the Pyramids — The lost Atlantis — Ingersoll, Thomas Paine, Voltaire, Abraham, Moses — The Bible

CHAPTER XXIII.

Age of letters — Criticism of history — Morning of humanity's manhood — The past forty thousand years.

The period since man first learned the use of iron and the use of symbols in hieroglyphics and writing — Ancient books and traditions of China — Confucius, Moses, and Christ — The ten commandments written on ancient Chinese altars — Ancient books of Hindostan — The Dabastin — The ancient order of Mendicant Priests — Ancient books of other India — Ancient symbols of the cross in Egypt and in India — History has repeated itself — God has sent to the ages prophets — The Moslem guide — The Koran — Ancient Babylon and Nineveh — Pyramids of Egypt, South America, and Ohio — Other ruins, relics, and traditions of antiquity — The Deluge — Obelisks, Peru and Yucatan — Archæology, Greece and Rome — Axial changes of the earth.

CHAPTER XXIV.

HUMANITY'S BOYHOOD — ANCIENT AGE OF BRONZE, EIGHTY THOUSAND YEARS AGO.

Ruins of ancient Swiss lake villages — The Mound-builders of North America — Ancient copper mines of Lake Superior, Mexico, and Bolivia — Ancient bronze instruments and implements of antiquity — A sameness whether obtained from excavations in America, Europe, Asia, or Africa — Ideal description of this ancient people.

CHAPTER XXV.

HUMANITY'S BABYHOOD — ANCIENT AGE OF STONE, TWO HUNDRED THOUSAND YEARS AGO.

Stone axes in immense numbers found almost everywhere in Europe in wells, mines, pits, and railway excavations — Fossil boat and harpoon of stone from the Grampian Hills — Bones, instruments, and relics of ancient savages — De Lesseps and the Suez canal across the delta of Egypt — Skulls and skeletons of a vast antiquity obtained from all quarters of the world — Ideal scenes and pictures of the people of the ancient stone age — Axial changes — We stand on a new earth under a new heaven.

CHAPTER XXVI.

HUMANITY'S BIRTH — ANCIENT CAVE-DWELLERS, FIVE HUNDRED THOUSAND YEARS AGO — CONTINUATION OF THE HISTORY OF THE SIXTH DAY.

Semi-human beings that have left their skulls and skeletons in caves — Ape-like but clearly human — Cave-dwellers of Europe, of England, France, and America — A comparative study of races — New Zealand savages, Bushmen, Indians, Negroes, Esquimaux, Flatheads, Highheads, Roundheads, monkeys, apes, chimpanzees, orangs, and gorillas — Tippenard — Constad and Cromagnor races of a tremendous antiquity — Sinking of the skull at the frontal vault — Semi-human brutes — The caricatures from which humanity came.

CHAPTER XXVII.

BETWEEN TWO ETERNITIES.

Illustrations — A mountain and a gulf — The building of the Brooklyn bridge — Digging the Hoosac tunnel — Looking two ways from the middle of the sixth day — The vale between two eternities.

CHAPTER XXVIII.

GENERAL SURVEYS OF THE LAWS OF PROGRESSION.

Descent of man — Origin of the species — Crossings and amalgamations —Octoroons of the South — Negro kings of Egypt — The amalgamation of negro blood in Egypt — Crossings among Chinese, Indians, and Caucasians — Consanguinity the death of families and nations — The broad highway from nature up to man — Huxley, Herbert Spencer — The homogeneous and the heterogeneous — Nature aiming toward perfection in all the types of life — Mankind to be a homogeneous unity with one heart and one mind.

CHAPTER XXIX.

LIFE WITHIN THE WOMB — EMBRYOLOGY.

The world's entire history is contained within the shut-up doors of thy mother's womb — The evolutions of the human embryo repeat in miniature the evolutions in the history of the development of life on the globe — Stages of the human embryo — Stages of life in the past of our planet — Metamorphoses — Caterpillars — Butterflies — "Aladdin and his lamp" a comparison — Aborted and atrophied organs — Embryos of frogs, lizards, and various animals — Miscarriages and abortions — A poem — Write them childless — Hen's eggs — Tadpoles — Inception of all life by division — Eve created from the rib of Adam — The eggs of all life.

CHAPTER XXX.

ALL FORMS OF LIFE BUT MODIFICATIONS OF ONE PLAN — BRAIN THE CO-HERALD OF GOD.

Comparative anatomy and botany — Animal and vegetable life compared — Compared with crystallization — Compared with the stars — Man and the animals closely related — Sensitive plants — The soul of flowers — A death-bed scene — Animals and the foliage in sympathy with man — Seeds and eggs — Whence their wonderful possibilities — Who tied up in the chaos of long ago the possibilities of this universe? — Science widens the mystery — Who made God?

CHAPTER XXXI.

ARGUMENT FROM SURGERY — PLASTICITY OF FLESH — MADE-MONSTERS — THE EYE.

Made-monsters — Deformed children — False joints — Deformities in general — Skin-grafting — Manufacture of noses and lips — Amputations — The honey bee — Tailless dogs of Menominee — Negroes with tails — The born blind — The growth of eyes — Star-fishes — Eagle's eye and the telescope — Whole clusters of eyes and clusters of teeth — Myeloid-tumors — Blind fish of the Mammoth Cave — All flesh but flesh — Flesh — Corruption and spirit — Life everlasting.

CHAPTER XXXII.

ANTE-NATAL INFLUENCES — A MOTHER'S TRANSIENT THOUGHTS PERMANENTLY EMBODIED IN HER CHILD.

Love and parentage — Hereditary law — Birth-marks — Jacob's calves — White polar animals — The Vermont mathematician — Dante, Napoleon — Roman and Grecian gods — The power of woman on the future character of our race.

CHAPTER XXXIII.

THE HUMAN BRAIN AND THE DEVELOPMENT OF ITS PARTS — CRANIOLOGY.

Phrenology — Gall, Spurzheim, Comb, Tyndall, Fowler, and Wells — The brain the organ of the mind — Size a measure of power — Phrenological organs — Bumpology — Heads of bears, lions, tigers, and various animals — Heads of preachers and pugilists.

CHAPTER XXXIV.

ARGUMENT FROM THE FACE — PHYSIOGNOMY.

How to read character in the face — Human and animal faces compared — The art of dissimulation — The facial angle — The forehead, nose, mouth, cheeks, chin, eyes, walk, manner, voice — All nature in harmony.

CHAPTER XXXV.

A MOTHER'S LOVE — EARLY INFLUENCES — SOCIOLOGY.

Little children — The Flotsam and Jetsam — Oliver Twist — Two brothers — Jean Valjean — The divine love — The mother a creator, her love — Washington, Lincoln, and their mothers — All the mothers of the great and good — Why should the spirit of mortals be proud ?

CHAPTER XXXVI.

CIRCUMSTANCES WHICH MAKE THE MAN.

Society — Wealth, poverty, virtue, crime — Newspapers, colleges, churches — A true man — The one perfect example on the sacred page.

CHAPTER XXXVII.

FUTURE OF HUMANITY ON THE EARTH — PROPHECY OF A MILLION YEARS — PRESENT CONDITION OF THE INHABITANTS OF THE PLANET VENUS.

Venus — Her cities — Her monuments and temples — Her inventions — Her arts and sciences — Agriculture — Labor — Industry — Her social system — Government — Husband — Wife — Children — Home — Her high moral and intellectual state — A millennium of righteousness — Christ and his precepts — Universal happiness — The earth's humanity viewed from the standpoint of Venus — Cæsar, Napoleon — The French Revolution — Waterloo, Sebastapol — Wolf, Cortez — The American Revolution — The great Rebellion — Mighty struggle of conflicting

human elements — Leading up to higher things — Future of humanity on the earth — Polar changes — Destruction — Progress — A glorious future — The earth will occupy the place of and be like Venus — Next of Mercury — She will at last fall into the sun — The coming brain and sinew.

CHAPTER XXXVII. — Continued.

Past and future of Jerusalem.

Sieges of Jerusalem — The Crusades — Rebuilding of Jerusalem — Biblical prophecies pertaining to Jerusalem — Future polar changes of the earth — The Venic age or millennium.

CHAPTER XXXVIII.

God manifest in his universe — Mind and matter — Idealism.

Idealism — Materialism — God's thought is the universe — All human thought hid away in the depths of Divine thought — Dreams — Descartes, Spinoza — Berkeley — Hegel — Kant — Ideas alone exist — Finite and infinite thought — Eternity.

CHAPTER XXXIX.

The future life — Gates ajar.

Death — Other senses of the soul — Unfolding — The universe viewed as a point on the shore of an infinite sea of life — Other phases of God's thought — Other mansions brighter and better beyond the veil.

CHAPTER XL.

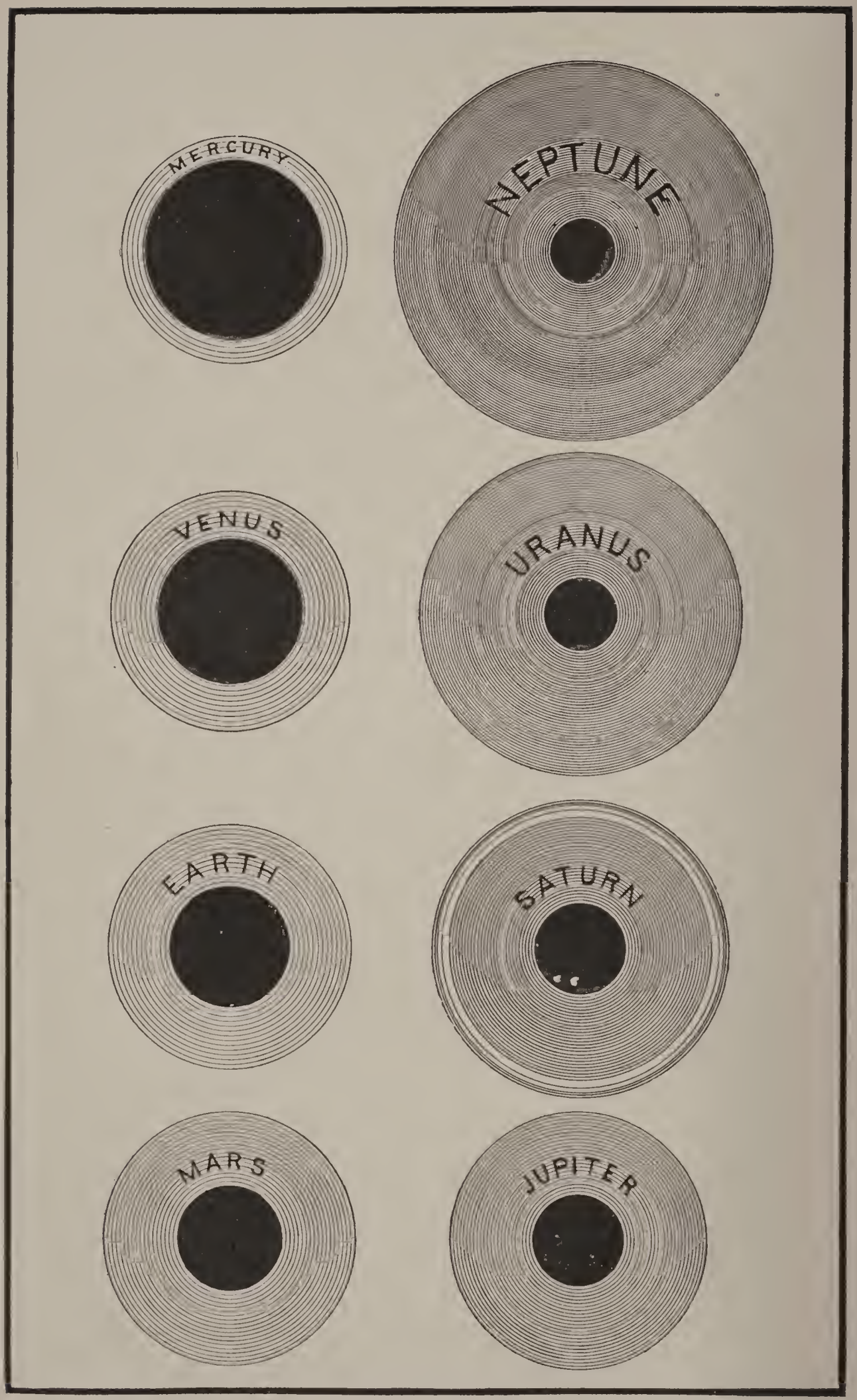
Meditations in the night — God's thought and the gleam of human consciousness.

Birth, growth, and death of worlds — The Milky Way — Heavens and hells — Wesley — Swedenborg — Channing — Man a small, a great being — Devils — Men — Angels — Seraphs — Jacob's ladder — A higher life, a deeper love, a wider vision, and a grander glory.

INDEX OF ILLUSTRATIONS.

	PAGE.
Author's Portrait	*Frontispiece.*
Comparative Sketch of the Planets	36
The Hills	45
The Foundering Bark	53
Dr. Hall in the Arctic Regions	71
Bolides and Ruins	77
Encke's Comet and Spiral Nebula	81
Planets, Past and Future	90
A Scene on the Planet Mars	99
Ideal Scene on the Planet Vesta	103
Midnight in the North	117
Like a Mountain	125
Niagara Falls	131
Motion and Position of the Earth	149
Earth before the Deluge	163
Eye, Ear, Heart, and Brain	182
Ruins in the Pacific	191
The Fiery Flood	197
Inhabitants of the Asteroids	220
Plesiosaurus and Pterodactyl	223
Megatherium and Mastodon	229
Antediluvian Monsters	235
The Glacial Epoch	243
Dr. Franklin in the Arctic Regions	251
Egyptian Catacombs	267
Building the Pyramids in Mexico	283

Ancient Hindoo Astronomy 293
Cheops and Cephron 303
In God's Eternity 315
Back in a Tremendous Past 323
Petrified Ancient Human Monster 328
Gorillas in Africa 337
Comparative Skeletons 365
Argument From Surgery 371
Druid Gods 383
Phrenological Organs 389
William Shakespeare 395
Man and the Animals 399
Von Humboldt 403
Children's Ring 409
Mother and Babe 415
Confronting Death 421
On the Planet Venus 431
Own Vine and Fig-Tree 437
Earth Viewed From Venus 443
On the Planet Mercury 453
Earth Falling into the Sun 457
Jerusalem 461
Sennacherib Attacking Jerusalem 465
Mirage Pictures 481
Dream of Immortality 487
Faith, Hope, and Charity 493
Meditations in the Night 499
Canopy of the Sky 507
Vision of Immortality 519


MERCURY
NEPTUNE
VENUS
URANUS
EARTH
SATURN
MARS
JUPITER

WAY-MARKS OF TWO ETERNITIES.

CHAPTER I.

THE ROCK ON WHICH WE BUILD — MATTER, FORCE, CHANGE, AND CAUSATION — THE ETERNAL ATTRIBUTES.

Science has applied the term "matter" to all things which can affect the human senses, or act, or be acted on, by force; in short, to the elements which compose this universe.

It does not at present concern us whether matter is a gross material substance, existing outside and independent of all consciousness, or the actual manifestation of thought; as proclaimed in Berkeley's "ideal philosophy."

The things which we see, feel, and touch, which we can analyze, weigh, and measure; viewed from the standpoint of a dream, are nevertheless realities: and these realities science calls "matter."

Philosophy, following in the line of Spinoza, Hegel, Kant, and Fichte, may yet demonstrate that matter is, after all, an apparition of human senses; and all atoms the consciousness of certain forces, and of possibilities unknown to us, behind which may lie hidden infinities; and that this sublime universe is simply and grandly a thought manifestation, displaying through finite human senses, finite phases of its consciousness in human

CHAPTER II.

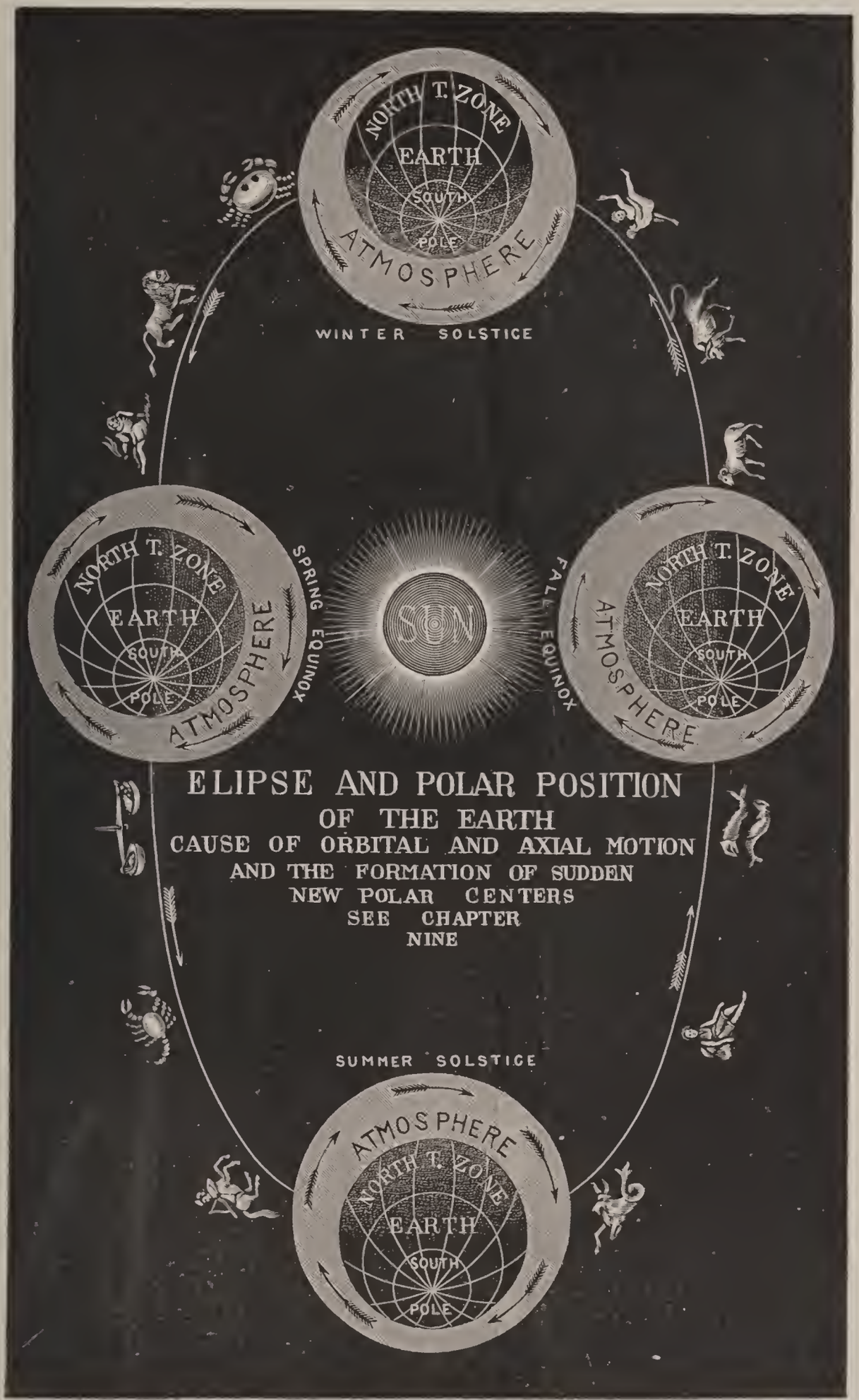
THE PERPETUAL CREATION — DYING AND BEING BORN FOREVER.

The evolutions of nature appear sometimes progressive, sometimes retrogressive; but in the sum total of things they are neither progressive nor retrogressive. The progression of one phenomenon compels the retrogression of another.

Life is possible only amid death. We subsist on death. Strange as the paradox may sound, we could not live unless we died. The blood in our veins is a stream of red and white globules, each a world of organized life, as perfect as we; this is the food that supplies the brain, where death takes place, where millions of red and white globules die, and their life leaps out in thought, affection, and volition. Every thought born of man springs from death; the thoughts we are thinking, and the emotions we are feeling, leap out of this grave we call a brain. This map of humanity is the blood globules of an unseen life at the death of which leaps out judgment.

> "Whose restless iron tongue calls
> Daily for its millions at a meal."

Planets are the blood globules of the sun's life, at the death of which, plunging into his bosom, they will replenish his source of heat and life, and be wafted back


NORTH T. ZONE
EARTH
SOUTH
POLE
ATMOSPHERE
WINTER SOLSTICE
SPRING EQUINOX
SUN
FALL EQUINOX
ELIPSE AND POLAR POSITION
OF THE EARTH
CAUSE OF ORBITAL AND AXIAL MOTION
AND THE FORMATION OF SUDDEN
NEW POLAR CENTERS
SEE CHAPTER
NINE
SUMMER SOLSTICE

CHAPTER III.

OUTLINE OF THE HISTORY OF THE BEGINNING OF THE CREATION OF THE HEAVENS AND THE EARTH.

"In the beginning God created
The heavens and the earth."

And now, reader, buckle on thy whole mental armor, and strive to get thee back, on the chimes of time, through eons of unnumbered ages, to a time prior to the earth's formation, to a time anterior to the sun's creation; and there in darkness and solitude, let the non-created mind contemplate the invisible universe.

For there was a time, far back in the eternities, when in the language of Job,—

"He spreadeth out the sky
Like a molten looking-glass,"

when all the matter which now composes our system was chaotic;

"Without form and void, and darkness
Was upon the face of the deep"—

a darkness pregnant with the possibilities of existing suns, and a chaos in which lay nascent the dormant forces of present life and progress.

Attraction, repulsion, affinities, and adhesion, with all the latent forces and active principles of matter, existed then as now, and elements, by chemical combustion, formed centers of motion; while surrounding cosmic

CHAPTER IV.

WORLD-EMBRYOS — FOOD SUPPLY OF FORMING WORLDS — METEORS, COMETS, NEBULA, AURORA BOREALIS.

"See, a star is falling, said the people,
From the sky a star is falling."

Such is the language of the poet Longfellow in his "Hiawatha," and Milton, also, in the fourth book of "Paradise Lost" uses a similar metaphor: —

"Thither came Uriel, gliding through the e'en
On a sunbeam like a shooting star,"

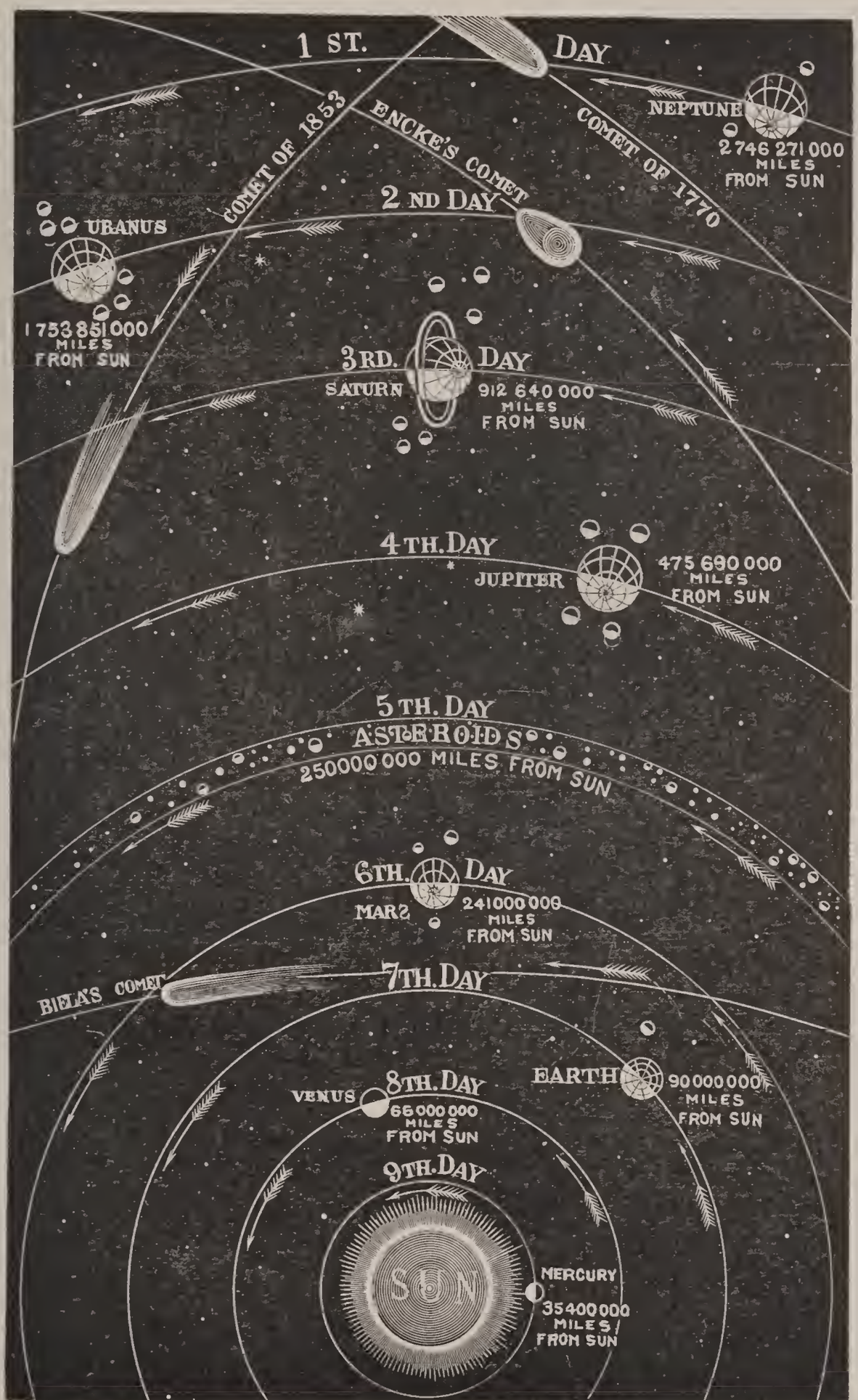
and the most ancient as well as modern writers not only give accurate descriptions of the brilliant phenomena known as shooting stars, but employ them as metaphors. Homer, in the fourth book of the Iliad, describing the descent of Minerva from the heights of Olympus, says: —

"Like a star shot by the son of crafty Satan,"

and Ossian, book the first, makes the bereaved Furgus to exclaim, —

"And thou, Morna, loveliest of maidens,
Plunged in darkness, like a shooting star."

Plutarch, in his life of Lucullus, describes how a battle between Lucullus in command of the Roman army, and Mithridates, was prevented by the heavens suddenly opening, and there falling to the ground a large burning


1 ST. DAY
COMET OF 1853
ENCKE'S COMET
COMET OF 1770
NEPTUNE
2746 271 000 MILES FROM SUN
2 ND DAY
URANUS
1 753 851 000 MILES FROM SUN
3RD. DAY
SATURN
912 640 000 MILES FROM SUN
4TH. DAY
JUPITER
475 690 000 MILES FROM SUN
5TH. DAY
ASTEROIDS
250000 000 MILES FROM SUN
6TH. DAY
MARS
241000 000 MILES FROM SUN
BIELA'S COMET
7TH. DAY
EARTH
90 000 000 MILES FROM SUN
VENUS
8TH. DAY
66 000 000 MILES FROM SUN
9TH. DAY
SUN
MERCURY
35400000 MILES FROM SUN

CHAPTER V.

EVOLUTIONS OF THE PLANETS — THEIR PAST, PRESENT, AND FUTURE — THE INHABITANTS OF EACH.

"THE heavens are the work of thy fingers ;
All of them shall wax old like a garment,
As a vesture shalt thou change them ;
But thou shalt endure."

Let us assume, for the purpose of conveying a clear idea of a principle, that the nine planets of our system, having been evolved from comets, all began, commencing with Mercury, as bulky nebular bodies, on the extreme outer confines of our system, near the present orbit of Neptune ; and that through the epochs of untold ages, they have been, step by step, assuming positions nearer and nearer the sun ; and with each successive involution, the old orbit has been re-occupied with the early chaotic nebula of all the planets, in succession, commencing with Mercury and ending with Neptune.

And in conformity with the record of Genesis, let the orbit of Neptune represent the first day in the histories of all the planets, Uranus the second day, Saturn the third day, Jupiter the fourth day, Asteroids the fifth day, Mars the sixth day, Earth the seventh day, Venus the eighth day, and Mercury the ninth day.

From the basis of this reasoning, it will appear that Mercury is the oldest planet of our system, having occu-

CHAPTER VI.

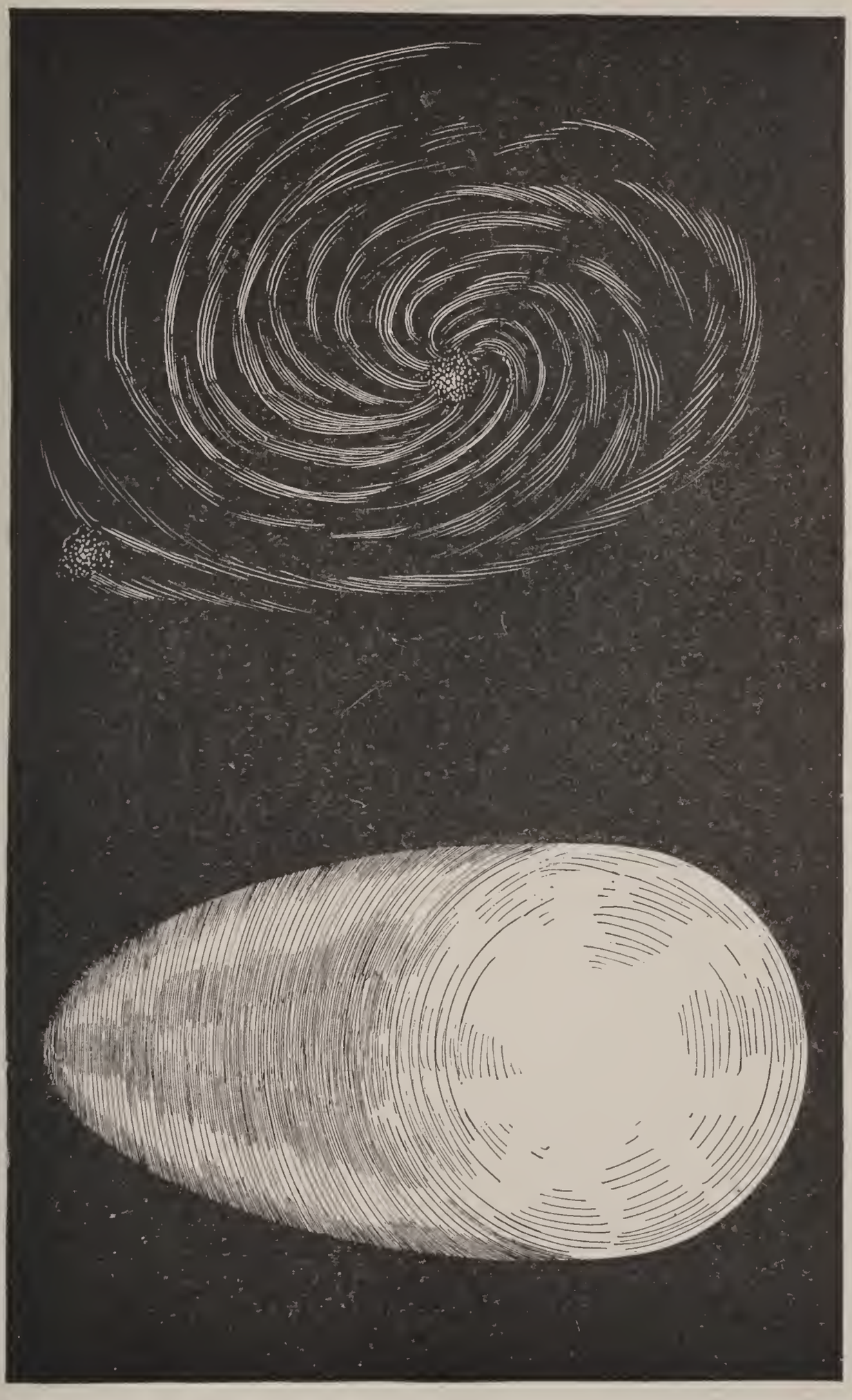
THE SUN AND HIS CORTEGE OF PLANETS — HIS PAST, PRESENT, AND FUTURE — OTHER SUNS.

"All night the dreadless angel, unpursued,
Through heaven's wide champion held his sway ; till morn,
Waked by the circling hours, with rosy hand
Unbarred the gates of light. There is a cave
Within, the mount of God, fast by his throne,
Where light and darkness, in perpetual round,
Lodge and dislodge by turns ; which makes through heaven
Grateful vicissitudes, like day and night.
Light issues forth, and at the other door
Obsequious darkness enters, till her hour
To veil the heavens ; though darkness might well
Seem twilight there ; and now went forth the morn,
Such as in highest heaven, arrayed in gold,
Imperial ; from before her vanquished night."

The sun, ninety-two million five hundred thousand miles from the earth, is eight hundred and sixty thousand miles in diameter, rotating on his axis every twenty-five and one third days.

A string of three hundred and forty beads the size of the earth would be required like the beads of a necklace to encircle the sun's waist. If we represent the sun by a globe two feet in diameter, a pea three hundred feet distant would represent the earth.

The sun is a body of gaseous, liquid, and partially stratified elements, surrounded with an atmosphere or photosphere of flame, and various metallic substances



GREAT SPIRAL NEBULA AND ENCKE'S COMET. THE EARTH AS IT WAS IN ITS EARLY EMBRYOTIC STAGES.

CHAPTER VII.

THE STARS — CHARACTER, MOTION, SIZE, DISTANCE — PAST AND FUTURE.

"Thou, proud man, look upon yon starry vault,
Survey the countless gems which richly stud
The night's imperial chariot. Telescopes
Will show thee myriads more, innumerable
As the sea-sands; — each of those little lamps
Is the great source of light, the central sun
Round which some other mighty sisterhood
Of planets travel, — every planet stocked
With living beings, impotent as thee."

We behold in the sun a near star not essentially different from other stars; they all fulfill an analogous purpose, giving light and warmth, and animating with life planets which revolve around them.

That the stars or suns of the stellar heavens are fiery bodies, undergoing transformations and evolutions similar to the metamorphoses of our own sun or of his planets, there can be no doubt, and this is apparent in their changing appearances.

Sirius, the brightest of the fixed stars at the present time, produces a white light, but according to the ancient Egyptian records, he was formerly red. Castor and Pollux, the twin stars, were once the reverse of their present luster and brightness; one has increased, and the other diminished. In the days of Eratosthenes, Antares was less brilliant than either of the two stars in Libra.

CHAPTER VIII.

OUTLINE OF THE HISTORY OF THE BEGINNING OF THE CREATION OF THE EARTH.

"In the beginning God created the heavens and the earth."

Reader, let us go back in the eternities, to the time when the unconscious and unorganized elements of an uncreated earth hung suspended in the dark abyss of a boundless and voiceless expanse.

"And the earth was without form and void,"

existing, or non-existing in the eternal profound of unconsciousness. Here the homogeneous substances of a future world slept in silence and solitude, unthought, unfelt, and unperceived. In this deep of waters no light had ever shone, no heat had animated, no motion moved,

"And darkness was upon the face of the deep,"

and more than darkness in the awful depths of that sea of solitude, indistinguishable from nonenity.

Far off in the infinite expanse God had lit the dawning fires of our sun, and his light, heat, and motion were bounding with lightning speed on a mighty mission; and in them the invisible forms of Jehovah and Jove, sounding the blast of creation; the chaotic, invisible nebula of our world was touched with light, a nervous electric thrill broke the spell of eternal solitude, chaos trembled with the flush of heat,—

"And the Spirit of God moved on the face of the waters;"

THE EARTH BEFORE THE DELUGE, WITH THE THEN NORTH POLE IN THE STATE OF UTAH.

CHAPTER IX.

SUDDEN POLAR CHANGES OF THE EARTH — ITS CRUST BROKEN LIKE A CRUMBLING SHELL — THE DELUGE — A KEY TO MANY THINGS IN THIS BOOK.

"He shaketh the earth out of her place,
And the pillars thereof tremble;
He treadeth upon the waves of the sea,
And overturneth the earth."

Dana has well said, "An atom in immensity is immensity itself in its revelations of truth, and science gathered from our small sphere is the science of all spheres." In like manner by observing the phenomena of the present, we learn the history of the past and foresee the future. We therefore invite the reader's attention to the study for a moment of a mechanical principle which will throw floods of living light upon what has been inexplicable mystery.

Why does the earth revolve on her axis, producing every twenty-four hours, day and night? We have shown in a general way that causation is eternal, but let us observe more closely the chain of causes which impart motion to the earth.

Heat expands, and cold contracts; this principle applies to the earth's atmosphere. The sun shines upon one side of the earth only, consequently expanding the

CHAPTER X.

CHEMICAL BASIS OF LIFE — MAN'S MATERIAL CHEMISTRY IS GOD'S IMMATERIAL GEOMETRY.

"And I saw a pure river of water of life
Proceeding out of the throne of God."

Behold the frost-work on the window, in picturesque imitation of landscapes; the mold on the cellar wall, waving to every zephyr; the foliage of hill and dale; — each the antitype of surrounding causes.

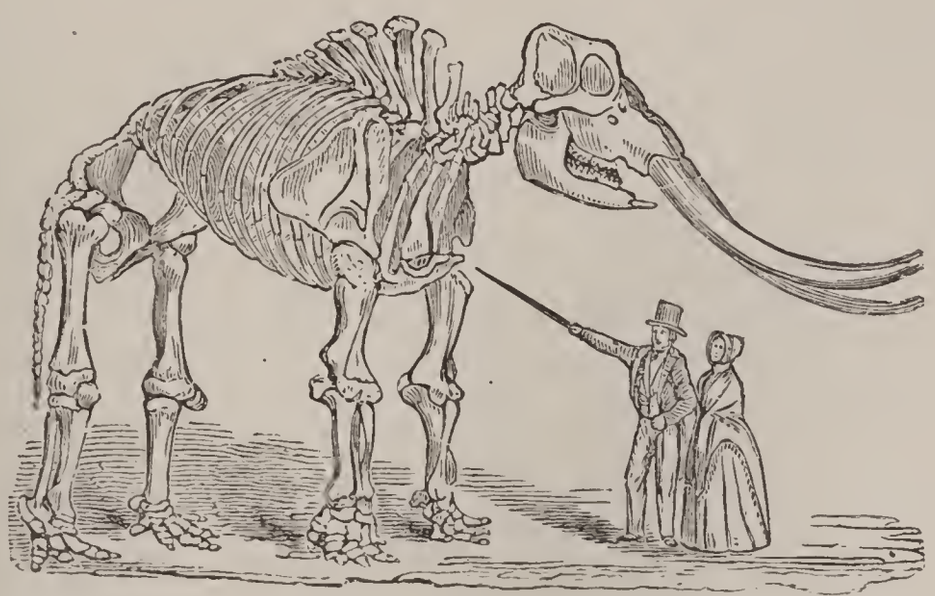
See lichens feeding upon rock and incrusting it with their own stony forms; corals building reefs; shell fishes, armadillos, and turtles, covered with huge plates of stone; adapted each to its environments.

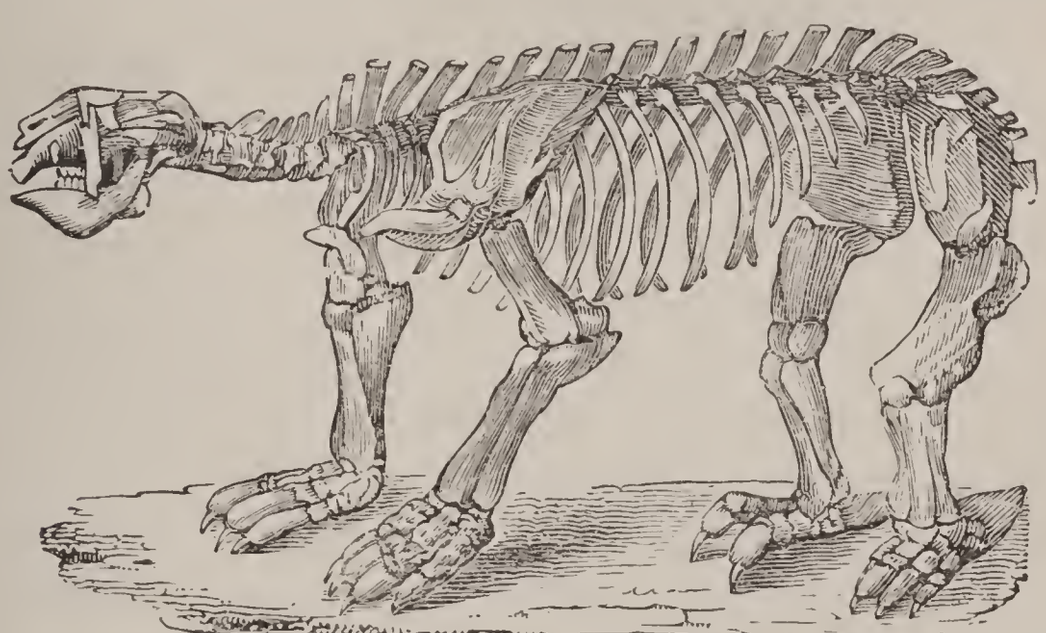
See atoms moving in obedience to affinities and repulsions; motes in the sunbeam; the flood of insect life; feathered songsters of the groves; all echoing back their environments.

Behold atoms, fishes, reptiles, — the animal kingdom, — humanity; all with senses measured to their state and place, and crystallizing into types, classes, kingdoms.

Behold this human-mold; in its cobwebs of brick, its temple-decked cities; each atom environed; and the whole crystallizing into classes, religions, governments.

Look again with the telescope into this upper dust of the eternities, the frost-work in the ethereal sky; yon Milky Way, waving a foliage to the music of zephyrs; dots of crystallized light, in fire-fly swarms; each atom





Fossil Bones of the Megatherium and Mastodon, Extinct Animals, now Inhabiting the Planet Mars.

CHAPTER XI.

SPONTANEOUS LIFE — NO LIFE WITHOUT ANTECEDENT LIFE — THE FIRST LIVING THINGS THAT INHABITED THIS GLOBE.

"And God said, Let the earth
Bring forth the living creature."

Whence come the swarms of animalcula, developing in water the moment it becomes stagnant, infinite in variety and number; the minute beings that sometimes turn a landscape of snow black in one hour; the parasites which infest other forms of life, and, dying, convert its substance into a moving sea of maggots? It is answered. — From germs of a preceding life. The advocates of spontaneity have also made replies.

We have neither space nor time to enter into the history of that battle which covers twenty centuries, in which great minds have been arrayed for or against spontaneous life; and the unlimited microscopic experiments of chemists, in which the victory on the part of the advocates of spontaneous life has been gained, and as repeatedly lost.

If we were not seeking for the truth, whatever the consequences; if we were pleading the part of a lawyer, resorting to any means of substantiating a case, we could produce an array of statements from high authorities, resulting from experiments, that would carry conviction as to the every-day development of spontaneous life.

CHAPTER XII.

THE MECHANICS OF LIFE — THE EYE, THE EAR, THE HEART, THE BRAIN.

"In the image of God created he him."

Life is a union of a number of nature's forces, and rises in the scale in the exact ratio of complexity. A living being is a combination of the living principles of matter — a union of the forces of nature; and rises to the image of God when thought and reason become the *receptaculum* of his thought; when it takes in the eternal principles of justice, mercy, sympathy, and love.

Let us compare mental and vital physiology with natural philosophy.

It has been said that "life is activity, is change, is motion;" and have we not shown that every atom of the universe is activity, is change, is motion?

It has been said that "life is a series of evolutions, from its inception to its dissolution;" and have we not found this to be true of atoms, worlds, and the universal law of things?

It has been said that "life is sexed, male and female;" and have we not shown that every atom of our universe is sexed, possessing an attractive and a repellant pole, without which crystallization could not occur?

It has been said that "life multiplies and perpetuates itself;" and have we not found that crystals evolve other crystals, suns other suns; and this to be a universal law of things?

[220] AGE OF REPTILES — FIFTH DAY OF THE WORLD'S HISTORY, AT THE PRESENT TIME REPEATED ON THE ASTEROIDS.

CHAPTER XIII.

INTRODUCTION TO GEOLOGY.

"Speak to the earth, and it shall teach thee."

The earth is a mighty book, containing a history of itself, every stratum of which is a chapter, every layer of rock an emblazoned page.

The whole detailed history of our world is written in this book. Every time a Vesuvius has opened its crater and belched out fire and lava; every time a Nile has broken from its bed and cut a new channel through a continent; every time a glacier has torn down a mountain; wherever winds have played upon the sands, rain drops beaten, or waves washed; wherever the worm has burrowed its home, and left its remains; wherever life has lived and died; wherever foot-prints have been made, — a record has been kept in rock, with fossils, preserved in sheets of stone, hardening from sand and clay.

Every coral reef that built up continents in the early seas; every type of fishes that came afterwards, and the reptiles which followed them; every race of mammals that roamed the forests of cycles of ages ago; every species of ape or man-like gorilla that inhabited the prehistoric earth; every type of cave-dwelling, fur-covered men, with the marrow-sucked bones they left behind; every race which had learned the use of fire; every tribe which made pottery and stone implements; the people

CHAPTER XIV.

FIRST DAY[1] OF THE WORLD'S HISTORY — AGE OF FIRE AND FALLING GRANITE — DESCRIPTION WHICH APPLIES TO THE PRESENT ON THE PLANET NEPTUNE.

"He thundereth marvelously in the heavens,
And the heights gave his voice hailstones,
And coals of fire. He commanded the sun
Not to shine, by the clouds which went between.
At the brightness which was before him,
His thick clouds passed hailstones and clouds of fire."

There was a time, far back in the eternities, when in this place of a solid earth, there existed a stupendous nebula of hot and fiery gases; hills and rocks were chaotic, phosphorescent clouds; and the ocean wrapped around all, millions of miles of vapory tresses; cooling and precipitating flakes of granite, which fell in steady showers from the vapory circumference towards the center. The more intense heat towards the center of the

[1] The word "day" is of course considered not as a literal day, but as symbolical of a long period of time — ages, during which God was fitting this earth as a home for man. The idea of exact days of twenty-four hours each is neither required by the original nor by the scope of the narration. The Christian fathers did not interpret it as a common day. Augustine, in the fourth century, called the days of creation "ineffable days," and described them as "alternate births and pauses in the work of the Almighty — the boundaries of periods in the vast evolution of the worlds." How glorious the idea which we here obtain of God, as, through measureless ages in which he is rich, resting not, hasting not, but slowly and by the steady operation

Fossil Bones of Plesiosaurus and Pterodactyl, Extinct Monsters Which Inhabited the Earth in Its Fifth Day.

CHAPTER XV.

SECOND DAY OF THE WORLD'S HISTORY — AGE OF FALLING OCEANS — FORMATION OF GNEISS — DESCRIPTION APPLICABLE TO THE PRESENT STATE OF THE PLANET URANUS.

"And God said, Let there be a firmament
In the midst of the waters, and
Let it divide the waters from the waters."

The process of continued cooling and condensation went on through infinite ages; and the watery vapors of a high upper firmament were slowly yet surely "bowing the heavens and coming down," and gathering in gossamer clouds on the face of the liquid sea of granite; its surface hardened into rock, like the formation of ice on the surface of water; and clouds began to precipitate moisture, and pour down flooding waters.

"Channels of water were seen, and
The foundations of the earth discovered."

Then commenced a series of actions and reactions, which for terrific grandeur and awful sublimity, were never equaled at any prior or subsequent period of the world's history. Hydrogen found its equivalent of oxygen, and vapors wrapped the world in a majestic fold; while steadily increasing torrents fell from the black sky.

Water, falling from the atmosphere, ran down into crevices of the rocks, and coming in contact with intense heat, became again converted into steam, breaking the

CHAPTER XVI.

THIRD DAY OF THE WORLD'S HISTORY — AGE OF DAWNING LIFE — CREATION OF MARBLE — SCENES NOW BEING REPEATED ON THE PLANET SATURN.

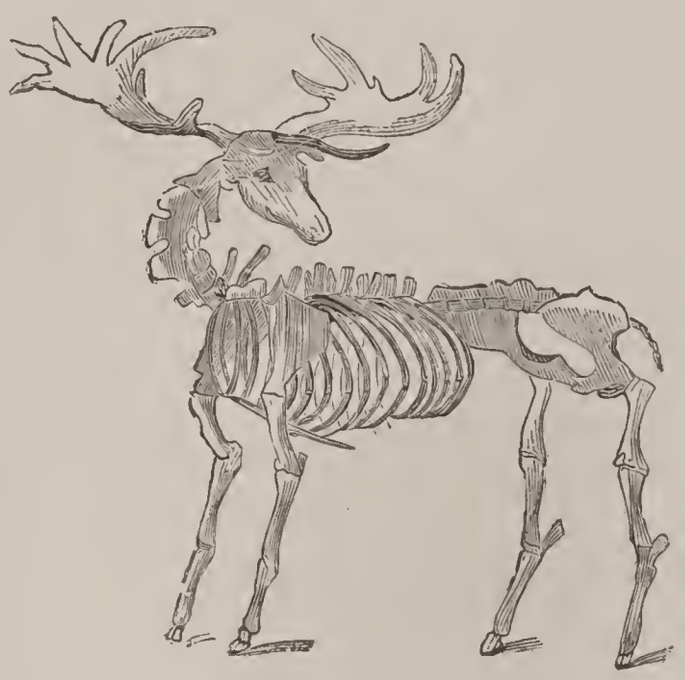
"The earth brought forth grass, the herb yielding
Seed, and the fruit-tree yielding fruit."

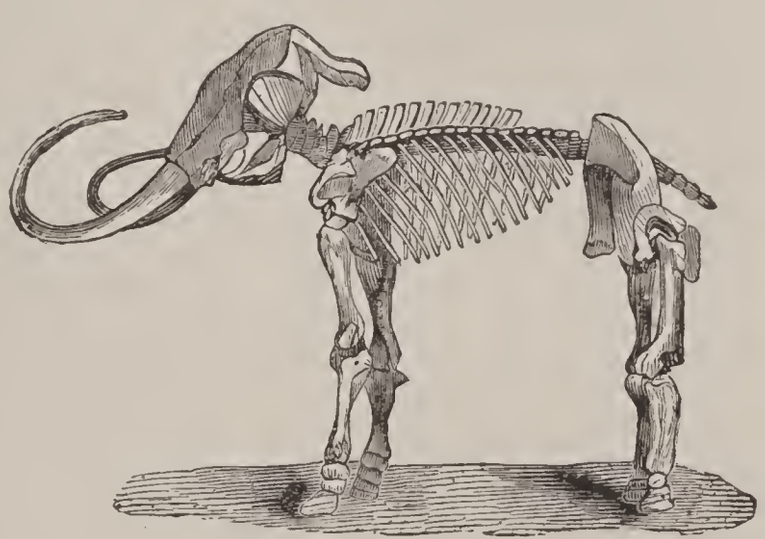
The conflicting elements of water and heat labored onward in mighty throes and convulsions, thickening the earth's crust at every rent and seam, in every distortion and upheaval; and barren wastes of rock lifted their cloud-capped heads high into the sky, while continents heaved their breasts amid the billows. and slowly prescribed the limit of receding tides.

"God said, Let the waters under the heavens
Be gathered together unto one place,
And let dry land appear; and God
Called the dry land earth, and the
Gathering together of waters, called he seas."

Gneiss is generally buried beneath vast accumulations of marble and other later formations, by heat and the influx of hot water, charged with various chemical substances, and crystallized into various substratified rock; and the evidence of the simple germs of life which first inhabited the globe obliterated.

Marble, however, is found in every stage of metamorphosis, from the lower, complete crystalline, the mid-





Extinct Antediluvian Monsters. Fossil Bones of Mammoth and Elk.

CHAPTER XVII.

FOURTH DAY OF THE WORLD'S HISTORY — AGE OF COMING BLUE AND BLAZING SUN — COAL FORESTS AND REIGN OF FISHES — A DESCPIPTION WHICH APPLIES TO THE PRESENT OF THE PLANET JUPITER.

"And God made two great lights,
The greater light to rule the day,
The lesser light to rule the night.
He made the stars also."

The mighty operations of nature may work on in ruin and desolation, but her grandest achievements are accomplished by slow labor through decades of centuries; step by step accomplishing plans, slowly but surely producing gigantic results. Century by century a steady advance takes place which cannot, in its fullness, be recognized save by comparing widely separated ages.

The fourth day covered countless centuries, like the preceding, in which types of life were struggling upward to higher forms.

From morning till mid-day, mosses and brakes were progressing and evolving, slowly but surely, to the grandest forests that ever clothed the earth; and through long ages of wonderful, magic growth, slowly yet surely devouring the poisonous black carbon of the earth's clouded atmosphere, and preparing earth and air for the abode of life.

The great, grand accomplishment of this age stands out so glorious and overwhelming, that the geologist

CHAPTER XVIII.

FIFTH DAY OF THE WORLD'S HISTORY — AGE OF CHAOTIC LIFE — THE REPTILIAN ERA — A DESCRIPTION WHICH APPLIES TO THE PRESENT ON THE ASTEROIDS.

> "And God said, Let the waters bring
> Forth abundantly the moving creature
> That hath life, and fowl that may fly
> Above the earth in the open firmament of heaven."

The great, startling record of the rocks, beginning the fifth day, is the wide-spread upheavals and distortions which changed the position of former strata, setting the coal measures on end, or forming incline planes, at the surface of which the coal fields still crop out; while in other portions of the earth's surface, they are buried deep with volcanic exudations, and later rock formations.

Great depressions and correspondingly vast upheavals changed the relative position of sea and land. Vast mountain chains broke through the level surface of former plains, and lifted their granite heads high into the sky, leaving the coal measures on either side in inclined layers, or buried deep with volcanic matter.

The whole rocky frame-work of the globe was broken up by the most stupendous convulsions the earth has seen. The coal measures were formed on the fourth day, and had it not been for that night of God's ruin, when he overturned the earth, and broke its shell like a crumbling wafer, which event divides the fourth and fifth days, one hundred and fifty feet of coal, or rather four hundred feet

ANCIENT HINDOO CALCULATING THE CONJUNCTIONS. [293]

CHAPTER XIX.

SIXTH DAY OF THE WORLD'S HISTORY — AGE OF CHANGING SKELETON AND COMING BRAIN — A DESCRIPTION WHICH APPLIES TO THE PRESENT ON THE PLANET MARS.

The reconstruction of axis, and the new and nearer orbit of the earth around the sun, which marks the opening of the sixth day, and convulsed the rocky frame-work of the globe, lifting higher the mountains by a new upheaval, or sinking them with whole continents beneath rolling seas, changed again the entire relative positions of sea and land.

Polar night gathers about the antipodes of a former equator; while continents of arctic ice lift their white bosoms and cold, crystal, mountain heads to the glare of a torrid sun; and the warm water of the oceans comes pouring in, unlocking the ice barriers, and forming stupendous glaciers, which are borne slowly away, in extensive deep strata of crystal white; planing the mountains and chiseling their rocks into fragments, finally breaking into detached icebergs, loaded with boulders and drift-rock, which float far off into melting seas.

I am aware that the glacial epoch has been an inexplicable mystery to geologists, and that they are in the habit of assigning only one such era as having occurred in all the past. The evidences of glacial action are numerous, and can be found in almost every part of the inhabited globe. Finding them the natural product of the changes of the earth's polar position, local in ex-

CHAPTER XX.

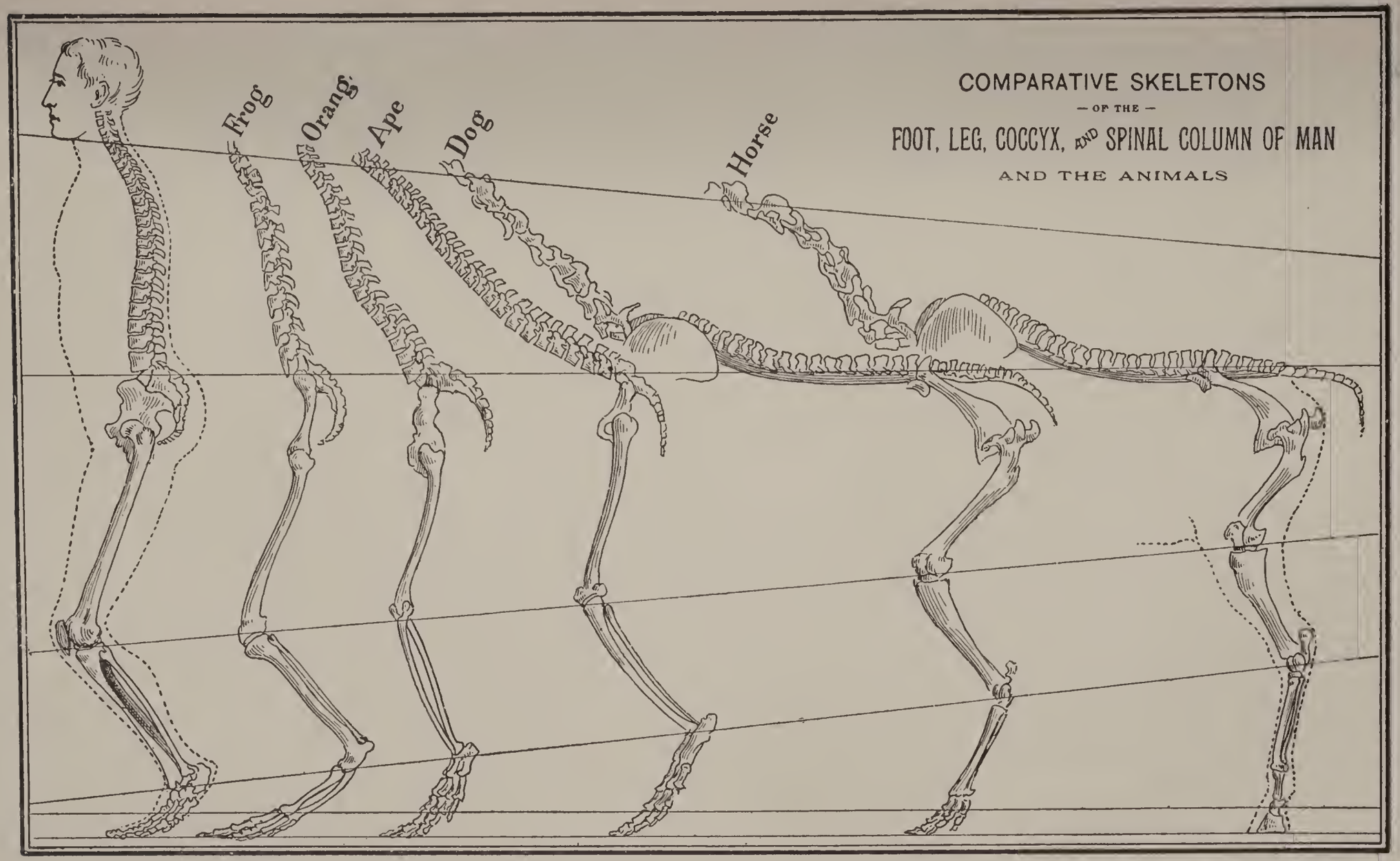
GEOLOGIC SUMMING UP — TIME IS LONG — GLACIAL ERAS.

"If all the books were written, the
World itself would not contain them."

The explored strata of the earth are meager, when compared with the unexplored portions of the earth's crust. Only a small portion of the earth's crust is accessible to man; four fifths of its entire surface are covered with water, and polar ice buries the antipodes of two mighty continents, while impenetrable wildernesses still occupy the greater part of the remaining portion.

Thus confined to a few limited points of the earth, and here only the surface is presented to the student of nature; true, the upheavals which have taken place in all the ages have lifted to the surface various underlying strata; from these isolated leaves we have deduced a history.

In these rock records, however, the general order of progressive evolution is clear; the known facts of geology, therefore, stand out like broken fragments of numerals in a long column of figures, 1–2–5–9–10. At the bottom, geology finds corals; next above, it discovers shells; higher still, it finds fossil fishes; above, it discovers rock containing reptiles; and still higher, it finds the remains of mammals; above all, is found human fossils.



"TO MAKE THE COMPARISON MORE STRIKING, LET US ADD TO THE GROUP THE APE AND FROG." [365]

CHAPTER XXI.

WHIRLWIND AND DELUGE OF FIRE—SODOM AND GOMORRAH.

"And the stars of heaven fell upon the earth;
Even as a fig-tree casteth her untimely figs
When she is shaken of a mighty wind.
Then the Lord rained upon Sodom and Gomorrah
Brimstone and fire, from the Lord out of heaven."

There was a time far back in the eternities when our sun, with all his brood of shining planets, was a cosmos of unorganized matter, "without form and void." The substance of our sun and system filled the boundaries of the most remote planets with one stupendous nebula.

From this chaos of material, gathered and condensed by the slow process of cometary fires, has come our sun and an infinite brood of planets; comets still swarm our system, drinking up the residual gases of the planetary spaces; and extensive fields of the original cosmos fill vast regions of the solar system, intermingled with, and holding gossamer folds between the planets, in the form of the Aurora Borealis.

When we consider the rapidity of the earth's axial and orbital motion, and look through the earth's atmosphere into the adjacent space, oftentimes filled with cosmic matter, aglow with light, is it any wonder that the northern lights should thus show lightning flashes and streaming prisms of rapidly fleeting colors?

CHAPTER XXII.

BIBLICAL CRITICISM — EGYPT, INDIA — THE BOOK OF THE DEAD, THE VEDAS — ADAM THE NAME OF A RACE.

"Is not this written in the book of Jasher?"

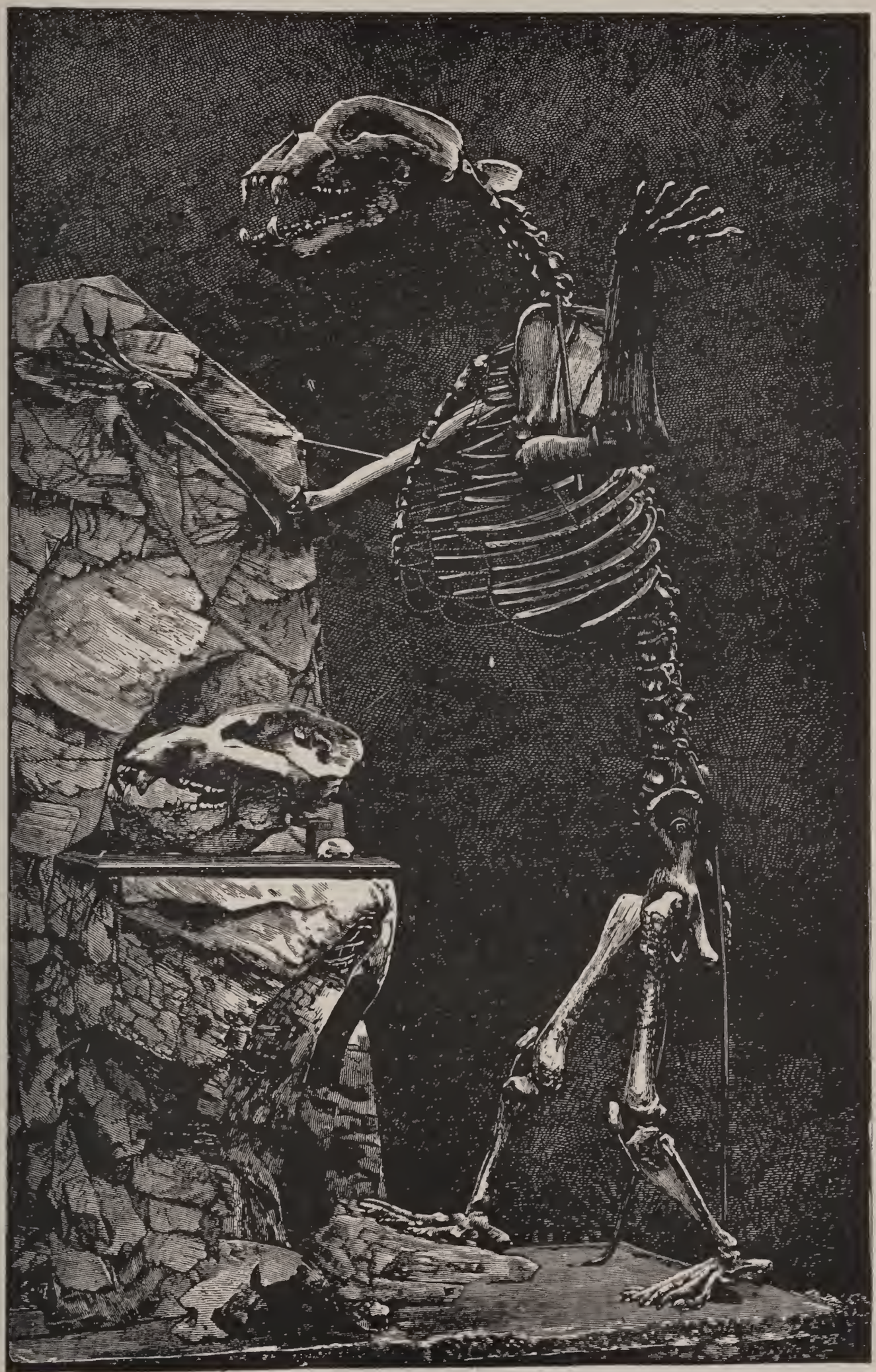
Adam was the ancient name of a mighty human epoch, a race of people who made their advent on the earth, far back in the night of an immense antiquity; in whom first dawned human reason and the blending of such qualities —

"That nature could stand up and say
To all the world, This is a man."

The Adam of Jewish mythology, the symbolic and traditional father of his people, the Adam of the second chapter of Genesis, was not the first man, nor the first Adam; the first chapter of Genesis bluntly declares that he was not.[1]

[1] Adam was, it appears, a red man. Winchell tells us that "Adam" is derived from the red earth. The radical letters, ÂDâM are found in ADa MaH, "something out of which vegetation was made to germinate;" to wit, the earth. ÂDôM and ÂDOM signify red, ruddy, bay colored, as of a horse, the color of a red heifer; "ÂDâM, a man, a human being, male or female, red, ruddy." (Preadamites, page 161.)

"It appears" says Ramsey, in his "Preadamite Man," "that the term 'ha adam,' generally used in the pointed text, that in Hebrew the prefix 'ha' is equivalent to our 'the,' and is of course an article, while 'Adam' was a proper name, and a collective patronymic, like 'Israel,' 'Jacob,' 'Gideon,' 'Dan,' and 'Reuben.' Though in some sense the term 'Adam,' differs from the others, in as much as it was a generic epithet. 'Adam,' without the



FOSSIL BONES OF A SEMI-HUMAN MONSTER RECENTLY FOUND IN SWITZERLAND.

CHAPTER XXIII.

CRITICISM OF HISTORY — AGE OF LETTERS — MORNING OF HUMANITY'S MANHOOD — FORTY THOUSAND YEARS.

The Chinese records tell of events that occurred among their ancestors one hundred and twenty-nine thousand years ago; their records of government, still preserved in their libraries, cover a period of eight thousand years; and they claim to possess fragmentary records of government sixty-three thousand years old. A Chinese work, written two thousand years before Christ, deals with the antiquities, and advocates the adoption of the ancient systems of education.

Whatever reply we make to these strange statements, one fact is certain, that China has sat, with her five hundred millions of people, within her two hundred million square miles of territory, in her cities, her monuments, her arts and sciences, the serene spectator of the birth and death of Greece; she has seen the beginning and crumbling of both imperial and republican Rome; she has seen dynasties, kingdoms, republics, revolutions; she has laughed as nations have come and gone, like bubbles bursting in air; she has looked on at the surging sea of wars, and the shifting map of humanity.

She has seen a modern Christ, coming in the night of a modern Jerusalem, radiant with glory, and profound with divine philosophy, standing in Galilee and teaching

CHAPTER XXIV.

HUMANITY'S CHILDHOOD — ANCIENT AGE OF BRONZE — EIGHTY THOUSAND YEARS AGO.

Eminent geologic authorities, cited in chapter nine, have placed the ice period, in North America, at a time two hundred and fifty thousand years ago ; these figures agree with astronomy in reference to the changing inclination of the earth, also with the changing relation of the North Star, as well as the changing " sideral duration of the moon."

If we accept the above figures, we must carry the Noachian deluge back to the remote date, at which time the earth's axis was suddenly changed, bringing what had been the old arctic regions, Utah and the United States, buried in ice, under a temperate sun, and what had been a temperate and tropical country, Greenland and Alaska, under the blast of their present ice and cold.

The tremendous lapse of time is implied from every standpoint by which we view it, whether to explain strata of earth above the drift, or the legends and traditions of the world relative to it ; and in the light of close scientific examination it is the inference of the Bible itself.

The great deluge, therefore, must be carried back, through a tremendous past, to a time earlier than has been conceived, approximating two hundred and fifty thousand years ago. These figures are based on eminent authority, and we reserve the right of changing our opinion in the light of new and more correct data.

PRAHMA. VISHNU. SIVA.

"Mothers Gave Birth to Children Resembling the Gods, Before Whom They Knelt and Prayed." [383]

CHAPTER XXV.

HUMANITY'S BABYHOOD — THE PEOPLE OF TWO HUNDRED THOUSAND YEARS AGO — ANCIENT AGE OF STONE.

Scholars have long been perplexed to explain the existence of stone axes and other stone implements, taken from deep pits and excavations, sometimes sixty and a hundred feet below the surface, so numerous that wagon loads of these ancient axes, alone, are now accumulated in British museums; picked up from railroad excavations, tunnels, wells, and otherwise underlying the gravel, and often associated with human skulls and skeletons, and bones of mastodons, mammals, and other extinct species.

In the year 1819, there was discovered, deep buried in the Grampian Hills, the fossil remains of a gigantic whale, perforated by a lance or harpoon of deer's horn. In this same Scotland, digging for the foundation of a church, was found a canoe hewn from a single oak, and within it a stone ax, twenty-five feet below the surface.

In sinking ninety-five wells across the Egyptian delta, the French engineers under De Lesseps, came upon an immense statue of Rameses, the base of which was twelve feet below the surface; they continued to bore, and reached an additional depth of thirty-three feet, when the diggers ran upon numerous fragments of pottery and various stone implements, of apparently savage workmanship. In various other pits, in localities from ten to sixty miles below Cairo, and at a depth of from thirty to sixty

CHAPTER XXVI.

HUMANITY'S BIRTH — FIVE HUNDRED THOUSAND YEARS AGO — ANCIENT CAVE-DWELLERS.

It will be remembered that we dropped the thread of our geologic history in the middle of the sixth day, "the age of changing skeleton and coming brain," the age prior to the Noachian deluge, which, according to figures obtained from geologic and astronomic sources, has been placed at a period approximating two hundred and fifty thousand years ago.

In the middle of the sixth day, we had discovered numerous "semi-human beasts," arising to the form and figure of man; numerous "semi-human animals;" unlike, yet resembling, modern orangs, gorillas, monkeys, apes, and chimpanzees, with here and there hand and face, form and figure, prophesying the advent of humanity,

"When God said, Let us make man;"

and we are informed, in the fourth chapter of Genesis, that there had existed on this earth races of beings, in human form, below the image of God, from whom the Adamites, Cain and others, selected their wives, from whose brains and hearts there beamed no rays of Divinity, reason, reverence, sympathy, justice, or mercy: —

"And the sons of God saw the daughters
Of men, that they were fair; and they took
Themselves wives from all whom they chose."

THE FACIAL ANGLE. (See Opposite Page.)

CHAPTER XXVII.

BETWEEN TWO ETERNITIES.

It has been said that "there exists between man and the animals an impassible gulf." The brave author of "The Vestiges" flew his kite, and landed it safely beyond the waters of this great gulf, by means of which Darwin drew across a firmly fixed wire; Huxley and Heckle wound it with cords; and we have also worked upon it, making firm and strong the cable of the future great and popular bridge of science.

When a small boy, my father took me to see the beginning of the then projected scheme of the Hoosac tunnel, where men were at work boring from the two sides of the tremendous mountain of solid rock, forcing their way towards a common center.

Such has been the plan of this book; on the one side of creation we began at the beginning,— God,— and tunneled our way step by step into the middle of the sixth day; on the other side of the mountain, we began with the present, and worked our way backward through human history, bronze ages, stone ages, and cave-dwellers; and in the middle of the sixth day our openings have met, and we stand between the barren peaks of two eternities, surveying the beginning and the ending, the past and the present.

Let us now ascend to the top of the mountain, and sink shafts from above, letting in floods of living light

CHAPTER XXVIII.

GENERAL SURVEY OF THE LAWS OF PROGRESSION.

The tendency of scientific thought has been to trace the origin of man back to single pairs.

True, as individuals, each one of us sprung from a single pair; this is as far as such a philosophy can be carried.

Each one of us had a father and a mother; therefore when we trace back our individual genealogies, we write first the number 1,— the me,— to explain which we discover the number 2 — a father and a mother; and to explain them we discover the number 4 — their fathers and their mothers; while the number of their parentage becomes 8; each of which had a father and a mother, and the number is again doubled; and so on indefinitely.

Hence, as we go back in our genealogies, the number increases in this doubling geometric ratio with each antecedent generation, and by a few moments' figuring, we go back to a time when one million of our ancestors lived, all at the same time, on this earth; they represented widely different races, spoke different languages, and inhabited various sections of the earth.

I see no law going back from multiple to single; on the contrary, the genealogy of all life goes back from single to multiple; and life itself becomes more numerous, in the same geometric ratio, as we go back from

"WE COME NOW TO THE STUDY OF CHILDREN."

CHAPTER XXIX.

THE HUMAN EMBRYO — ITS DEVELOPMENT IS A MINIATURE REPETITION OF THE HISTORY OF LIFE'S PROGRESS ON THE GLOBE.

"THERE is a path which no fowl knoweth,
Which the vulture's eye hath not seen,
In the shut-up doors of thy mother's womb."

The development of every human embryo, from protoplasm to a mollusk, then to a fish, next to a reptile, next to a mammal, afterwards to a fetus, then to birth and babyhood, through childhood to manhood, corresponds with and repeats in miniature, the history of the development of life on this globe.

The human embryo begins as an unorganized chemical compound. The elements next arrange themselves in a crystalline form, and it becomes protoplasm, precisely such as the elements assumed far back in the past when they were mixing and uniting to form the first protoplasm on this globe.

The human embryo next becomes a single minute cell, representing the early geologic age of corals.

The human embryo next becomes a cluster of cells, typical of the next geologic age of sunfishes and low mollusks.

The human embryo soon exhibits a single cavity or heart-sac, typical of the heart-cavity of higher mollusks, and in this stage represents the geologic age of mollusks.

The human embryo next assumes an outline scarcely distinguishable from the fully-developed embryos of

CHAPTER XXX.

PLANTS AND ANIMALS COMPARED WITH MAN — ALL LIFE BUT VARIATIONS OF ONE PLAN.

What is there in common between a tree, birds warbling in the branches, or man enchanted by the symphonies of their music?

The first scientific difference between vegetable and animal life is in the relative proportion of chemical elements composing them.

The elements underlying all forms of life are oxygen, hydrogen, nitrogen, and carbon; in vegetation, however, nitrogen is found less abundant than in animal tissue.

Man and the animals consume oxygen, and give out carbon through their lungs; while plants, breathing with their leaves, inhale carbon, and give out oxygen; they are composed alike of a multiple of cells and nearly the same elements.

We observe as we ascend step by step upward, from vegetation to animal life, a difference in the arrangement of cells, and the consequent formation of organs.

The leaves of plants, which answer to the lungs of animals, instead of being clustered into one pair of lungs, are scattered in countless numbers over the branches.

In plants, food is absorbed by means of numerous roots, while similar absorbents, the villi of the lacteals, cover the surface of a central cavity, forming the stomach.

Vegetation can exist on crude inorganic substances, while man and the animals subsist on the same substances refined through vegetable growth.

"The Mother in Her Office Holds the Key to the Soul." [415]

CHAPTER XXXI.

PLASTICITY OF FLESH — ARGUMENTS FROM SURGERY.

False joints sometimes occur in the human organization. Man by accident breaks a limb ; from carelessness, or inattention on the part of the surgeon, the fracture is left movable, and a false joint is formed, possessing, in a rudimentary degree, all the essential characteristics of other joints. And instances are on record when such accidental new joints have been transmitted to offspring, by the same law of transmission by which families perpetuate five toes or five fingers.

Plastic surgery is the building, by artificial means, of absolutely new organs or parts. The necessary tissue is sometimes turned or twisted into position from a neighboring locality, thus leaving a blood supply ; often, however, the flesh is taken from other parts of the body, and even other persons ; and success has attended operations with flesh from other animals, especially that of the chicken and frog.

The ugly deformities of hare-lips are sometimes overcome by the surgical manufacture of absolutely new lips, with flesh generally brought into position from the cheeks or chin.

New noses are frequently made, with flaps turned from the tissue of the forehead or from the arm ; and instances are related where a portion of the thumb has been successfully grafted as the base of a new nose. The surgical methods of the manufacture of noses have become

CHAPTER XXXIII.

ARGUMENT FROM THE BRAIN — PHRENOLOGY.

If this book was one of biography, and I was going to pay tribute to men, I should do it to the discriminative and practical understandings manifest in the writings of Gall, Spurzheim, and Combe; to the bold but true, loving spirits of these great fathers of a new science.

These men have clearly demonstrated that the brain is the organ of the mind, and that it is composed of parts, having each a separate office to perform; that one portion of the brain evolves will, another reason, another perception, another sympathy, and yet others mechanics, mathematics, affection, music, veneration, etc.

Tyndall goes further, and remarks in substance, that mental processes are the result of the agitation of brain fiber; that every separate fiber produces a distinct kind of thought or feeling.

The separate organs of the brain, therefore, run into each other by an insensible gradation, just as thought and feeling present every degree and phase of manifestation, running into each other by an imperceptible blending. And yet each separate portion of the brain has for its office the production of different passions, emotions, sentiments, etc.

Size, other things being equal, is a measure of power. By knowing, therefore, the location and office of the separate parts of the brain, the measure of the force and na-

CHAPTER XXXIV.

ARGUMENT FROM THE HUMAN FACE AND FORM — PHYSIOGNOMY.

"Tell me by what hidden magic
Our impressions first are led
Into liking or disliking,
Oft before a word is said.

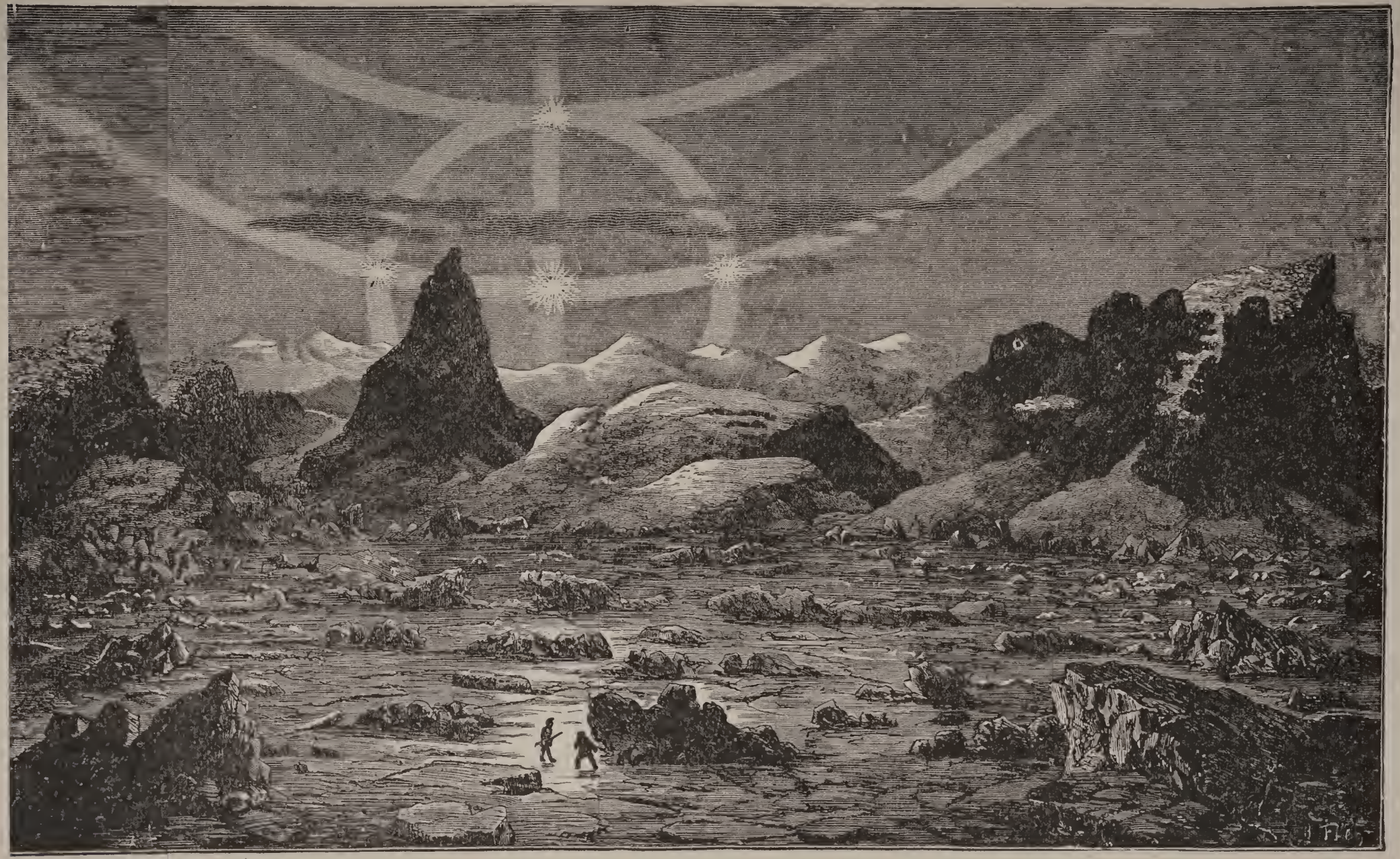
"Why should smiles ofttimes repel us,
Bright eyes turn our feeling cold;
What is that which comes to tell us
All that glitters is not gold?

"Is it instinct, is it nature,
Or some freak or faulty chance
That our likings or dislikings
Limit to a single glance?

"Is it? Pray will no one tell me,
No one show sufficient cause
Why our liking and disliking
Have their own instinctive laws?"

Even as man is related to the animal kingdom, having been evolved out of it, both as regards his descent in the geologic ages, and also as regards his individual embryonic development, he still retains more or less the resemblance of his ancestral pedigree, and consequent relationship to various animals.

And as in looks and appearances, so in character; even as men resemble various animals, so also a sameness in their natures.



"THE SUN, WITH HIS RAINBOWS AND MIRAGE PICTURES IN THE HEAVENS." [481]

CHAPTER XXXV.

SOCIOLOGY — A MOTHER'S LOVE — CHILDREN — EARLY INFLUENCES.

We come now to the study of children, the flotsam and jetsam on the rude sea of life. How I love you, lamb-like flocks of little things!

"Yours is the sunny dimple,
Radiant with untutored smiles;
Yours the heart serene and simple,
All unwarped with selfish wiles.

"On your dimpled, sunny faces,
There are no deep lines of sin,
None of passion's dreary traces,
That betray the wounds within."

Let us trace the child in its varied surroundings, in the influences which act upon it, for good or evil; in its wanderings, surrounded by the winds and waves of temptation, perhaps dashed on the shoals of dishonor and crime; or perchance surrounded with kindlier influences, impressed by daily lessons, and stamped with all the markings of a noble nature, reared into manhood and womanhood; the embodiments of virtue, purity, self-sacrificing benevolence, piety, wisdom, and made the light and strength of society.

Dickens has well shown, in his "Oliver Twist," that inherent nobility and goodness will sometimes survive the force of evil example and evil surroundings, amid

CHAPTER XXXVI.

CIRCUMSTANCES WHICH DEVELOP THE GREAT AND GOOD IN HUMAN CHARACTER.

"I know, indeed, the mind that feels the fire
The muse imparts, and can command the lyre,
Acts with a force and kindles with a zeal,
Whate'er the theme that others never feel;
If human woes her soft attention claim,
A tender sympathy pervades the frame:
She pours a sensibility divine,
Along the nerve of every feeling line;
But if a deed, not tamely to be borne,
Fire indignation and a sense of scorn,
The strings are swept with a power so loud,
The storm of music shakes the astonished crowd."

Discussing as we are the physical, mental, and moral creation, this work would be incomplete without some reference to the circumstances which develop the great and good in human life and character.

Even as the world itself has been evolved from war and turmoil, by a long series of seemingly adverse circumstances, melted down and agitated with fire, deluged with floods, buried in ice, tossed from its base, rolled on its axis, its shell broken in pieces like a wafer, only to rise out of destruction to a higher plane, to evolve from turmoil a grander serenity; so human sympathy, charity, nobility, and intellectuality are evolved amid the strife and conflict of human avarice and human passion, ex

"'Tis Night; I Sit in My Window Looking Out Into the Bright Canopy of the Sky." [507]

CHAPTER XXXVII.

FUTURE OF HUMANITY ON THE EARTH — PROPHECY OF A MILLION YEARS — PRESENT CONDITION OF THE INHABITANTS ON THE PLANET VENUS.

"THE light of the moon shall be as the light of the
Sun; and the light of the sun shall be sevenfold,
In the day that the Lord bindeth up the breach of
His people, and healeth the stroke of their wound."

In forecasting the future of humanity on the earth, let us attempt an ideal description of the people and condition of society existing at the present time on the planet Venus; and afterwards endeavor to analyze the forces and evolutions in the long ages of her mighty history, that have resulted in her present high intellectual and moral attainments.

"I had a dream which was not all a dream."

I saw mighty cities, with ribs of solid steel, temple-decked and sumptuous with splendor, with walls of granite and roofs of marble vaulting up, abounding with sculpture, wrought from the most varied and beautiful stones.

Ages of labor and human genius had accumulated vast forests of imperishable art. Beneath my feet were polished stones. Man had e'en excelled nature in the formation of columns of colored glass, china, porcelain, and other indestructible, emerald imitating, and diamond

CHAPTER XXXVIII.

THIS UNIVERSE IS THE MANIFESTATION OF GOD'S THOUGHT — THE FINITE IN THE INFINITE — MIND AND MATTER.

"The fool hath said in his heart, There is no God."

It will be remembered that in the opening chapter of this book we evaded the discussion of the fundamental constitution of matter. Let us now, from the standpoint of logic, take a new view of the creation.[1]

We are forced to the conclusion, in the study of the human mind and its relation through the senses to external things, that this mysterious and wondrous universe is not a mechanism of dead matter, but an emanation from the mind of an infinite and eternal "Ego;" and that the human senses are the simple avenues of its own divine and reflex consciousness.

We can doubt the existence of a universe of dead matter, but we cannot doubt the existence of a universe of our thoughts — a universe which appears to be — the universe which we think is. We can doubt the philosophy of atheistic materialism, but we cannot doubt the reality of an ideal universe existing in and through our senses.

Even though the universe be an hallucination, the hallucination is a reality. Even though our senses deceive us, there is truth in the illusion.

[1] If this chapter is not a demonstration, then tear up your logics, your arithmetics, your algebras, and your geometries — they are all fallacies.

MEDITATIONS IN THE NIGHT. [499]

CHAPTER XXXIX.

GATES AJAR — CONTINUATION OF THE PRECEDING CHAPTER — THE LIFE BEYOND THE GRAVE.

"If a man die, shall he live again?"

Were we for the first time to consider the scene of death, how confused would be our ideas in regard to the great mystery before us. "What is it?" we would ask, and how anxiously would we watch for some signs of waking, not giving up hope, until decay began its ravages on the form before us.

And then, as we should consign to the earth the one so recently among us, a moving, breathing, speaking man, now a mass of decayed matter, we should feel that we buried there, not the body only, but the whole man.

Physical nature utters no voice to tell us otherwise; she emits no light to illuminate the grave; darkness and silence rest there, till the light of revelation shines upon it, and God proclaims man's immortality.

Reason cannot explore the mysterious depths; philosophy contemplates a dark, impenetrable mystery; and science shrinks from the great unknown beyond the veil.

Yet up from the depths of our own souls wells the heaven-born hope of immortality; the divine in our natures, — thoughts and feelings, — numberless, nameless, unutterable, unfathomable emotions within us proclaim —

"It is not all of life to live, nor all of death to die,"

A METEOR FROM A CLEAR SKY. THE BOOK OF THE NINETEENTH CENTURY.

WAY-MARKS OF TWO ETERNITIES:

A LIBRARY OF SCIENCE.

By W. E. JURDEN, M. D.

An Encyclopedia of Universal Knowledge for Moralists, Philosophers, Scientists, and Historians.

It deals with the eternities, the creation, the evolution of planets and their inhabitants, life, death, the here and the hereafter, etc., etc.

PROFUSELY ILLUSTRATED.

The book will contain 521 octavo pages, printed from new type, on heavy paper, together with 55 full-page illustrations, many of which were designed and engraved especially for this work. The book will be sold only by subscription.

THE BINDINGS are elegant and substantial, the styles and prices being as follows :—

OLIVE CLOTH, Embossed in Red and Brown, Marbled Edges,	**$3.50**
BLUE CLOTH, Silk Finish, Embossed in Gold and Black, Gilt Edges,	**4.00**
LIBRARY, Full Sheep, Marbled Edges,	**4.50**
HALF MOROCCO, Gold Side and Back, Extra Marbled Edges,	**5.00**
FULL PERSIAN MOROCCO, Gold Side and Back, Gilt Edges, Superior Finish,	**6.00**

We, the undersigned, subscribers to the above work, agree to take it at the price named, when delivered, provided it corresponds with the foregoing description.

No.	NAME.	STYLE.	Residence and Address.	Occupation.	Date of Delivery.

No.	NAME.	STYLE.	Residence and Address.	Occupation.	Date of Delivery

No.	NAME.	STYLE.	Residence and Address.	Occupation.	Date of Delivery

No.	NAME.	STYLE.	Residence and Address.	Occupation.	Date of Delivery

No.	NAME.	STYLE.	Residence and Address.	Occupation.	Date of Delivery
1961					

BOUND TO PLEASE
THE
Heckman
Bindery Inc.
MANCHESTER,
INDIANA

LIBRARY OF CONGRESS
0 041 156 219 0